SEPTEMBER, 1953 • 20c

Better Farming Methods

For County Agents, Vo-Ag Teachers, Soil Conservationists, and Extension Specialists

Quarter Century REVIEW

of

Agricultural Extension
Agricultural Education
Soil Conservation

25th ANNIVERSARY ISSUE

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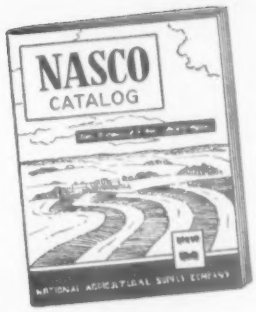

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Business Magazine for Leaders Who Train and Advise Farmers

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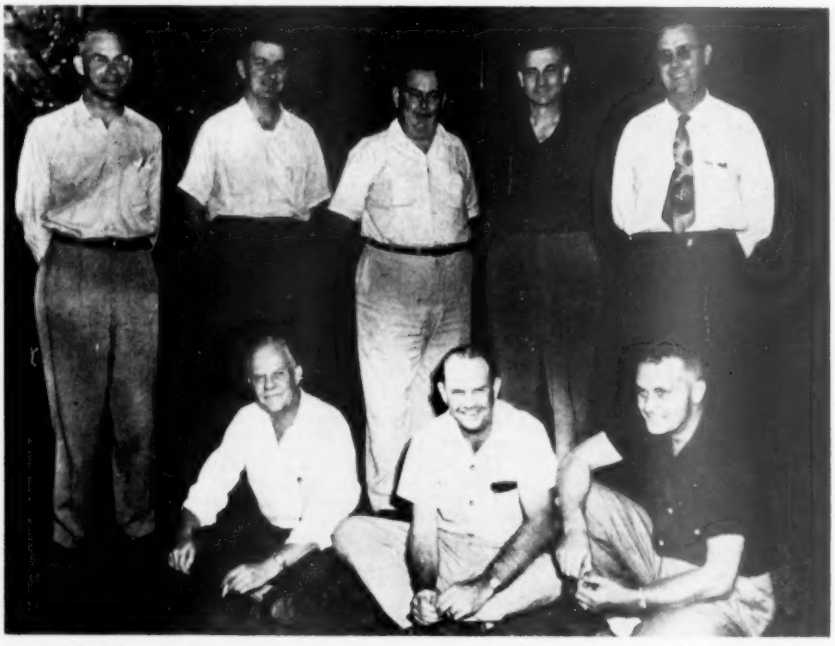
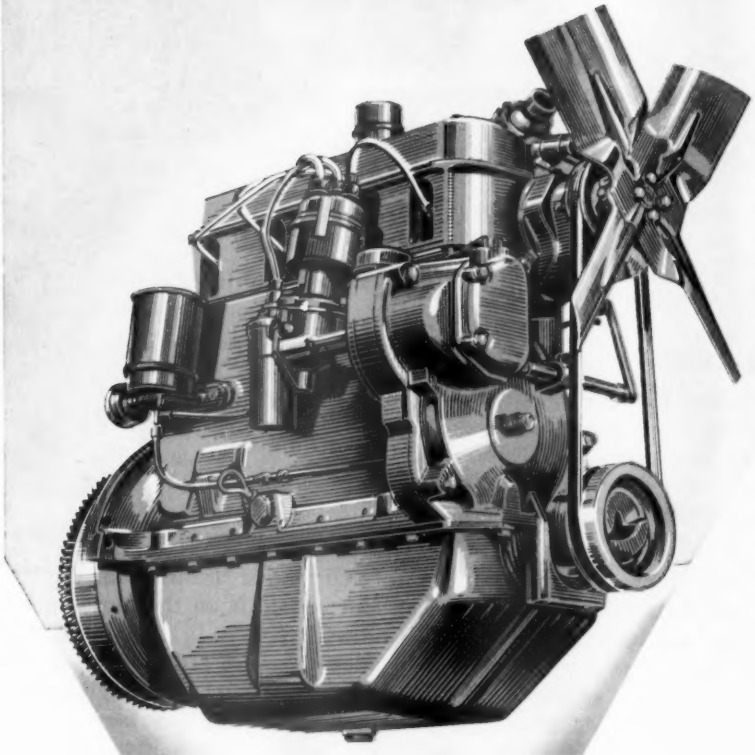
NVATA Executive Committee Members



Left to right, members of the NVATA executives committee are, standing, Neldon Taylor, vice-president, California; Max Lampo, president, Missouri; S. F. Peterson, vice-president, North Carolina; Jess Smith, treasurer, Wisconsin; and Lionel Cross, executive secretary. Seated are, left to right, Leon Johnson, vice-president, Minnesota; Joe Cuffman, vice-president, Texas; and Robert Howey, vice-president, Illinois. Robert A. Wall, vice-president, Virginia, was unable to attend the meeting. (Story on page 62)

ALLIS-CHALMERS ANNOUNCES



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WASHINGTON NEWS

By Fred Bailey and Jay Richter
(Exclusive to Better Farming Methods)

Emphasize Research-Education

Greatly increased emphasis on agricultural research, information, and education is the objective of a new program being worked out by USDA in cooperation with Land Grant Colleges and the farm organizations.

Announcement of a proposed program is due sometime this fall. Intentions are to present it to Congress early next year.

If Congress approves and votes funds to finance it, the program would provide for a greatly strengthened Extension Service to take the findings of researchers to virtually every farmer in the nation. The program has the dual purpose of:

Fred Bailey

(1) Expansion and speeding up of agricultural research, particularly in the marketing field;

(2) Getting research information to farmers in useful form as speedily as possible.

Those who have worked on the program view it as perhaps the most important development in recent years for expanding cooperative efforts of the USDA and Land Grant Colleges in the research field. Greater emphasis would be placed on getting research findings off the shelf, and into the hands of farmers.

If carried out in the form now planned, the program would mean an increase in the staff of most county agents. The plan includes increased emphasis on work with the 4-H clubs to help farm youth in developing an early understanding of scientific methods and leadership.

USDA Fights Foot-Mouth Disease

Behind USDA's advance planning to cope with a possible U. S. outbreak of foot-and-mouth lie fears that the disease may never be wiped out in nearby Mexico.

The fact has not been publicized by the Department, but American "aftosa"-fighters are only now being allowed to return to the Mexican quarantine zone of heavy infection.

For many weeks, due to Mexican hatred for the "sanitary rifle" slaughter of infected herds, American members of the joint Mexican-U. S. Commission had been confined to a buffer area on the perimeter of the quarantine zone lying in Veracruz, 400 miles south of Brownsville, Tex. There they did little but twiddle their thumbs while Mexicans turned to vaccination in efforts to control the disease.

A new arrangement, permitting U. S. foot-and-mouth experts to return to the zone, had been worked out as this issue went to press. The Mexicans are still refusing to permit slaughter which veterinarians of this country now think is necessary for elimination of the disease. But USDA officials are hopeful infected herds can be liquidated gradually without causing great economic losses for Mexican cattlemen.

Nobody can tell, yet, how the new arrangement with Mexico will work out. If it does not, there will be no alternative for this country but to withdraw to the border. Protecting American herds there will be much more difficult, if not impossible, according to vets.

Farm Problem to Ike

Farm price troubles now have been dropped in the lap of the President himself. This could be expected with an issue which is red-hot politically, since Eisenhower is head of his party as well as Chief Executive of the Nation.

In a quiet White House session, GOP farm leaders in the lower house laid it on the line. They told the President, in effect, that Republican plans to reduce farm spending might have to be put off, indefinitely.

Eisenhower has been non-committal, but Washington consensus is that in the showdown he would go along with the prevailing view on Capitol Hill.

USDA Funds Are Less

USDA funds for operations in the present fiscal year that started July 1 have been agreed upon.

For its regular work (excluding price-support losses, and cash from previous years that may be spent this year), the department has been voted $720 million, or about $15½ million less than last year. Most agencies are getting about as much as usual, however.

Extension Service's appropriation for this year tops $28 million. It is slightly more than last year, but somewhat less than Benson had asked. Most of the money goes to states.

SCS with $61½ million has slightly less money than last year for its regular work, but gets an additional $5 million in "new" money for flood control experiments in small watersheds.—*End*

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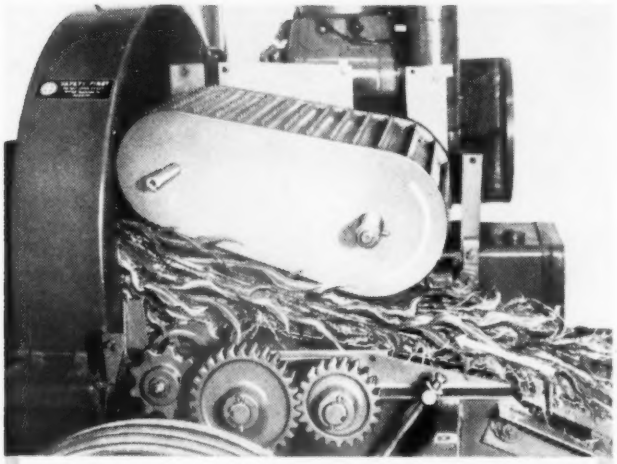

In this picture, the housing has been removed to show details of New Holland's exclusive Flotrac feed. Upper feed apron is fully floating and synchronized with the lower apron. It features crawler type action with all blades saw-tooth to prevent slippage. Notice how the full length of the upper apron bears down to keep a steady flow of material to the chopping knives. There's no slipping, wrapping, clogging or backing up.

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Business Magazine For Leaders Who Train and Advise Farmers

Published Exclusively for County Agents, Vo-Ag Teachers, Extension Specialists, Soil Conservationists and Other Agricultural Leaders

ESTABLISHED 1916

SANDSTONE BUILDING, *Mount Morris, Ill.*

August 20, 1953

OUR 25TH YEAR

Dear Agricultural Leader,

Only once in a lifetime do you celebrate 25 and 50-year anniversaries. Therefore, this is a significant year for you.

The Future Farmer organization is 25 years old. Farm demonstration work, born as an idea in the heart and mind of Dr. Seaman A. Knapp, has passed the half century mark. In each case, only through your tireless efforts have these two anniversaries come to pass.

An idea or an organization, without sound leadership, soon flounders and dies. It is a tribute to you, and the thousands of leaders before you, that this idea and this organization has grown and prospered.

On this, also our 25th anniversary, the staff of Better Farming Methods joins me in congratulating you leaders on a job well done. We wish you continued success in the future.

As the years come and go, hold high the torch of leadership! Keep it steady! Instil in your people the fact that the future of agriculture is in their hands. Be diligent, be alert, and work for the continued growth and prosperity of agriculture.

This country needs today, and can always use in the future, sound and wise leadership that holds to the principles which have made our agriculture and our country great.

Leslie A. Watt

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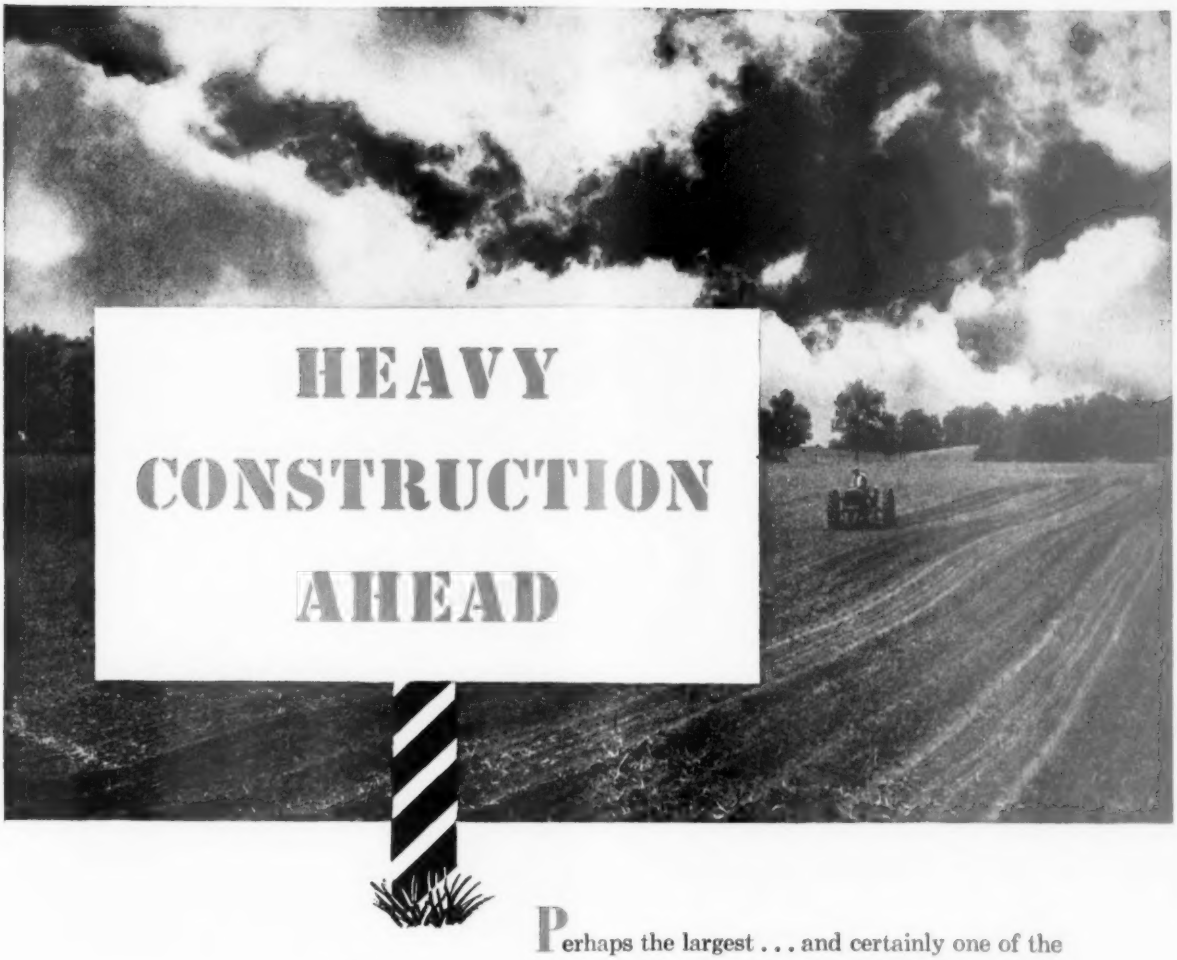

Perhaps the largest . . . and certainly one of the most important construction jobs facing us today is the building of soil. Our farming land must not only maintain its high productive level—it must actually increase its yield if we are to meet the demands of a rapidly growing population.

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in our

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ANNIVERSARY

ISSUE

Webster Tenney

H. M. Hamlin

C. M. Ferguson, director, USDA Extension Service, Washington, D. C. His subject is the county agent and extension field during the past 25 years.

T. A. Erickson, consultant, rural services, General Mills, Inc., relates the developments in the 4-H field from 1928-1953.

A. W. Tenney, executive secretary, Future Farmers of America, Washington, D. C. Tenney discusses the development of FFA during this period.

H. M. Hamlin, head, agricultural education department, University of Illinois, Urbana, Ill. Dr. Hamlin writes about progress in the vo-ag teacher field.

September, 1928

September, 1953

Robert M. Salter

Byron J. McMahon

A. G. Kettunen

W. T. Spanton

Ralph H. Musser

Edwin Bay

Robert M. Salter, chief, Soil Conservation Service, USDA, Washington, D. C., maps the progress of soil conservation during the past 25 years.

Byron J. McMahon, supervisor, vocational agriculture, San Luis Obispo, Calif. He briefly states his predictions of future expansion in the ag teacher field.

A. G. Kettunen, state 4-H Club leader, East Lansing, Mich., pulls back the curtain on the next 25 years in 4-H Club work.

W. T. Spanton, chief, agricultural education service, Washington, D. C. Spanton states his opinions of what the next 25 years might hold for FFA.

R. H. Musser, regional director, Soil Conservation Service, Milwaukee, Wis. What will the next quarter century bring in conservation? Read his opinions.

Edwin Bay, farm adviser, Sangamon county, Springfield, Ill. An active county agent gives his predictions of things to come in the county agent field.

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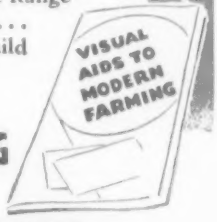

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You Should Be Proud–but You Dare Not Rest

● I AM HAPPY to have the opportunity in this 25th anniversary edition of Better Farming Methods to pay my respects to the county agents, vo-ag teachers, soil conservationists, and other agricultural leaders of our Nation. The past quarter century has witnessed a remarkable upsurge in agricultural productivity and an equally remarkable advance in the living standards of rural people.

Many factors have been involved in this record of progress, but I know of none more important than the factor of education in which you have played a dominant role. Yours has been the job of bringing to agriculture those techniques and skills which have helped farm people in the past quarter century to double their output per man-hour. This achievement has meant much not only to farmers but to the whole country, and more than that to the entire free world.

Without this agricultural progress it would not have been possible for our beloved Nation to have made the stupendous war effort which brought victory in 1945. Without this agricultural progress it would not have been possible for the generous people of the United States to provide the programs of food relief and assistance which have been so important in maintaining the spirit and cohesion of the free world.

Without this agricultural progress we could not today face the future with such confidence as we now have in the ability of the United States, with God's help, to withstand whatever challenge the enemies of freedom may hurl against us.

You may well be proud of your accomplishments; but still you dare not rest upon them. There is still so much to be done. The great demands upon our agriculture will grow not smaller but larger in the years to come. We shall have to produce more efficiently—market more effectively.

In this task that lies ahead, not only the farmer, but all the people of our country depend heavily upon you. I am convinced that the most important method of promoting the welfare of farm people and the Nation is the method of research and education in the production, processing, marketing, and utilization of farm products.

You must continue to bring to the farm and the farm family those skills which will increase efficiency, lessen waste, foster more fruitful employment of talents and land, and produce the end result of better homes and better farms for better living.

May I take this occasion to express my complete confidence that you will meet your responsibilities in this field fully and competently.

—Ezra Taft Benson.

You Must Be a Leader, Not Just a Teacher

● THE DEPARTMENT of Health, Education, and Welfare is the agency of the Federal government which, as its name suggests, is principally concerned with promoting the public health, encouraging the improvement of educational standards in our schools, and providing a measure of economic security for those of our people who are unable to provide it for themselves.

Teachers of vocational agriculture, like all teachers, of course, are concerned with these basic human needs as well as spiritual and moral values.

The great advances that have been made in agriculture during the last quarter century stem from the enormous increase in our scientific and technical knowledge. Research and experimentation, however, have little ultimate meaning unless they are translated into action. The contributions of teachers of vocational agriculture in making these findings known have been important.

They have recognized, moreover, that their responsibility is much broader than teaching improved agricultural production. Every day, by precept and example, they are helping to develop spiritual and moral values in their students, thus adding their influence to those of parents and of the church.

The agricultural teacher is concerned, too, with the health of the people he teaches. He must help his students realize the importance of wholesome living and what it means in terms of a sanitary home environment and safe working conditions. He should be among the first in his community to teach the significance of group effort in bringing about better medical attention and better hospital care in rural localities.

Finally, as a leader himself, he must train youngsters to lead and, ultimately, to take his place.

Among the notable achievements of the national vocational agriculture program has been the development of the Future Farmers of America, an organization through which farm boys are taught how to accept community responsibilities, how to develop leadership, and how to work together for the common good.

The individual achievements of Future Farmers of America members have been outstanding, but no less stirring have been their group efforts in community improvement activities throughout the Nation.

I am confident that the Future Farmers of America and vocational agriculture teachers will continue their excellent record of training for citizenship and for the tasks of agriculture.

—Oveta Culp Hobby.

THERMOPANE® INCREASES FARM PROFITS

Read what these farmers say about their experiences

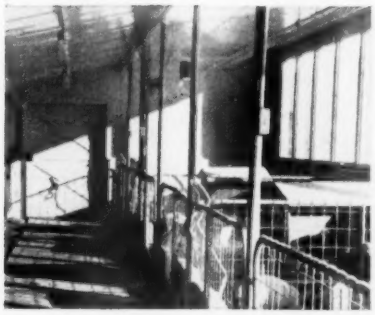
DAIRYMEN

Manville P. Cook,
Wysox, Pa.

"Plumbing in the milkhouse does not freeze, although there is no auxiliary heat. Much nicer in winter as I do not have to wear heavy clothing. There is no steaming up, as before. The windows are easy to clean and give more daylight than other glass."

Nels Hokanson,
Verona, Wis.

"Dairy barn was improved by replacing conventional windows with *Thermopane*. Better wintertime warmth, cooler in summer. Livestock health is better and working conditions improved. Attractive appearance appeals to visitors."



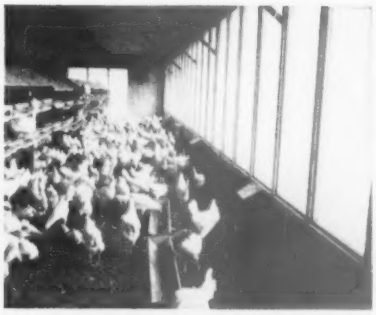
BREEDERS

Tillman Bubenzer, Conner-Prairie Farm,
Noblesville, Ind.

"Five to 10 degree winter temperature increase noted after *Thermopane* windows were placed in pig nursery. Daylighting improved 100 per cent. Relative humidity reduced 15 per cent. Pigs benefited from direct sunshine, vigor increasing through more exercise. Drier bedding made less work."

Elmer Dasenbrock,
Leigh, Neb.

"My calf loss was high before building my new calf barn. Now it is practically nil. I give much of the credit to the *Thermopane* windows. Daylighting is very good and I have excellent wintertime warmth. Condition of the bedding is good and the livestock health is definitely better."



POULTRYMEN

Verne Taylor,
Fairview, Ill.

"Obtained three dozen more eggs per hen per year in part of building glazed with *Thermopane* than in similar wing with same size windows, single glazed. Very little mortality. Drinking fountains didn't freeze, even in coldest weather. Minimum of ammonia fumes from litter, which stayed dry and hasn't been changed in two years."

Coyt M. Ingraham,
Thorndike, Me.

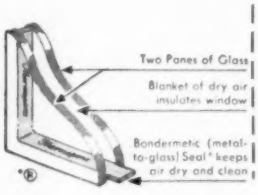
"Sunlight is one of the best things in the world for chickens and with *Thermopane* you can sure get all the sunlight there is. I think that is why I have been able to raise such good birds. My fuel costs have been greatly decreased. The broiler house is lighter and makes more pleasant working conditions."

These are just a few of the many reports received from farmers who have used *Thermopane* insulating glass. These are their own statements, not ours. Identical gains in production—identical savings—of course, cannot be expected by everyone. That is because the benefits received result from many factors, which vary by climate and local conditions. But these reports are assurance of good results—assurance of conditions conducive to increased production and better livestock health—assurance that you can recommend *Thermopane* with confidence. We have prepared folders on *Thermopane's* benefits in livestock raising. Mail the coupon for your copies.

SOLAR FARM BUILDING PLANS—The Better Farm Buildings Association has prepared complete plans. Working drawings, plus a complete list of materials, are available from L·O·F at $2 per plan.

L·O·F GLASS · PLASKON · FIBER GLASS

Thermopane
INSULATING GLASS



Libbey-Owens-Ford Glass Company
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Please send me:

☐ Free folders on *Thermopane* for dairy, hogs and sheep, poultry.

Plans for:

☐ Dairy barn ☐ Hog house
☐ Milkhouse ☐ Poultry laying house
☐ Calf barn ☐ Broiler house

For which I enclose $2 each.

Name_____

Street or R. R. No._____

Town_____ State_____

THE OLD WAY . . . it took more labor, more time.

Extension Meets Challenge Of 25 Turbulent Years

By C. M. Ferguson
Director of Extension
U. S. Department of Agriculture

● WHEN I WAS ASKED to contribute an article for this anniversary issue on the history of Cooperative Extension work during the 25-year period from 1928 to the present, I thought the task would be fairly easy.

Now I realize what historians must be up against when they try to pick and choose and evaluate the happenings of a period such as this.

Not being a historian I decided to do what the early-day pioneers did when they made a trail through the forests. They didn't stop and blaze every tree along the way. Just one here and there to point the way. So, let's follow along this 25-year trail and see what developments took place.

The Years 1928-1933

Here we are back in 1928. Compared with this jet-propelled year of 1953 it seems like a mighty easy-going affair. But it was not as easy-going as it may appear to us today.

Some of you may recall the corn-borer control campaign of that year. Those of you who were county agricultural agents at that time no doubt recall that your work was taking on a more permanent standing in farm communities.

What about 4-H Club work? Nearly 644,000 boys and girls were club members.

In 1929, county agents were stressing the need for more efficient production and marketing with the objective of large net returns per acre and per head of livestock. They were also giving a good deal of attention to training local leaders.

By 1930 the effects of the world-wide depression and of drought were beginning to be felt throughout the land. There was a rapid growth of home industries in rural areas to increase cash income for taxes and other immediate needs.

Emergency drought conditions existed in practically all of the agricultural regions of the country. County agents laid aside for a time a good deal of their regular program and gave the major part of their time to helping farm people cope with the emergency. They pointed out ways farm people could cut expenses and get their debts into more manageable shape.

County agricultural agents helped to secure reduced freight rates on hay, feed, and water shipped into drought areas and on livestock shipped out of such areas. Lower rates were obtained on 60,000 carloads of hay, feed, and livestock at an estimated savings of several millions of dollars to farm people.

In December, 1930, a Federal loan fund of 45 million dollars became available to farmers. County agents informed farmers of how to save their farms from foreclosure, including where to apply for loans and how to comply with loan requirements.

Further stress was placed on ways to reduce farm expenses. Fall gardens for home food supply, emergency rations for livestock, culling of herds and flocks, forage crops for fall and spring pasture, and helping farm people locate and obtain needed supplies of feed and forage, were given a great deal of attention by agents.

There was a greater realization of the fact that helping farmers solve their production problems was not enough. A special appropriation of 1 million dollars was made by Congress for extension work in economics and marketing.

In 1931 the Secretary of Agriculture designated drought counties. County agents helped move cattle out of drought areas or get hay shipped in. In that same year there were over 890,000 boys and girls enrolled in 4-H Clubs.

Drought was hitting farm people even harder by 1933. Extension was delegated the task of acquainting farmers with

METHODS IMPROVE . . . county agents lent a helping hand.

FOR "GRADE A" PRODUCTION WITH LESS DRUDGERY USE

QUONSETS® FOR DAIRY BARNS

the new standard for American farms

Easier cleaning is just one advantage of a well-planned Quonset loose-housing dairy barn.

"Our Quonset makes it possible for my wife and me to handle 48 cows without extra help," says Walter Woods, of Freewater, Oregon. "We're mighty busy at milking time, but there's no getting up and down, and very little walking. It's hard to see how we could have made milking so efficient without the help of our Quonset."

With overhead hoppers, Mr. Woods easily meters feed to cows in milking parlor.

Planned Quonset dairy barns do reduce time and labor costs—do permit farmers to increase herd size and productivity without increased man-hours.

Post-free, all-steel Quonset construction gives you the best in labor-saving design. Makes cleaning easier—keeps cattle healthier—and helps produce top quality milk.

There's a wide range of Quonsets easily adapted to your specific dairy needs—as a stall barn, loose-housing barn, milk house, milking parlor, or hay drying and self-feeding storage building. They're easily lighted, insulated and ventilated—keep stock cool in summer and comfortable in winter.

Talk it over now with your authorized Quonset dealer—a specialist in modern steel construction. Ask him about the Quonset Purchase Plan.

A Complete Line of Quonsets for Better Farm Production

GREAT LAKES STEEL CORP., Stran-Steel Div.,
Ecorse, Detroit 29, Mich.

Please send me latest literature on Quonsets for dairy barns____, other Quonset farm service buildings____. Send me the name of my nearest Quonset dealer____.

Name____

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GREAT LAKES STEEL CORPORATION
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NATIONAL STEEL CORPORATION

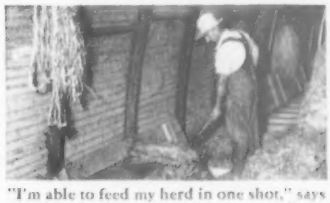
37

Two new handbooks on modern DAIRY BARNS

Authentic, authoritative and amply illustrated, these two handbooks summarize latest practical information on stall-type barns and loose-housing systems—help you plan for efficient production. For copy of one, or both—

SEE YOUR QUONSET DEALER

DAIRY FARMERS PROFIT FROM THEIR QUONSETS

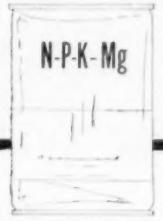


"I'm able to feed my herd in one shot," says Lloyd Wolf, Denver, Pa., "without walking through all the feed alleys."

"Our Quonset lets us feed our herd of 200 Holsteins without any help," says Manuel Costa, Merced, Calif.

"My barn blew down on the 23rd of June," says Donald Schutte, Hamel, Minn. "In just four weeks my Quonset barn was ready."

SOLUBLE MAGNESIUM
the FOURTH ELEMENT
in the Fertilizer Bag



Sul-Po-Mag®
Water-Soluble Double Sulfate of Potash-Magnesia
$K_2SO_4 \cdot 2MgSO_4$

Soluble magnesium—a basic ingredient in mixed fertilizers in many crop growing areas—is commonly spoken of as the *fourth plant food element* in the fertilizer bag.

The practical and economical way for the farmer to get magnesium in soluble form is with a fertilizer containing *Sul-Po-Mag*, a properly balanced combination of *sulfate of magnesium* and *sulfate of potash*. Both are water-soluble and immediately available to soil organisms and growing plants.

Fertilizer manufacturers from coast to coast are including soluble magnesium as the fourth element in their quality grades. Wherever there are evidences of magnesium deficiencies in the soil, farmers are finding it profitable to use soluble magnesium on a wide variety of crops.

It pays the farmer to look for a quality fertilizer containing *Sul-Po-Mag*—to look for it *in* the bag and *on* the bag.

WRITE FOR FREE BOOKLET

Increase Crop Quality and Yields.

International Minerals & Chemicals

potash division
INTERNATIONAL MINERALS & CHEMICAL CORPORATION
General Offices: 20 North Wacker Drive, Chicago 6

reasons for the various production-control programs. County agents helped organize county and township committees and production control associations. They concentrated efforts on getting farmers to put in grass on land taken out of crop production.

The Years 1933-1938

By 1933 4-H Club enrollment was nearly 922,000. The year 1934 saw county agents busy with adjustment programs for cotton and tobacco, and the corn-hog adjustment campaign. They trained 118,000 committeemen to work on these programs.

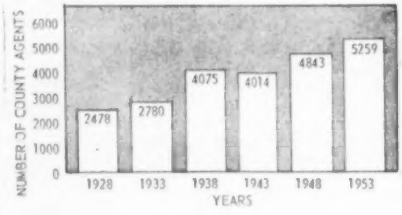
In that same year Cooperative Extension helped the Farm Credit Administration to organize 600 local production and credit associations. They acquainted producers with available credit facilities and methods of using them.

The AAA transferred 6 million dollars to extension for educational phases of the agricultural adjustment programs.

Extension Supports New Programs

Extension was giving educational support to the new farm programs: Soil conservation, rural electrification, farm security. County agricultural agents, for instance, gave widespread support to soil and water conservation work which

County Agent Scoreboard



is an essential part of extension's broad educational program. Extension teaching was a vital factor during this period in the formation by farm people of soil conservation districts.

The Bankhead-Jones Act for the further development of Cooperative Extension Work was passed June 29, 1935.

Feed Crops Get Attention

The severe drought years of 1934 and 1935, together with the launching of the National Agricultural Conservation program in 1936, focused attention on feed crops, pastures, and soil building. Just when it seemed that relief from drought was in sight it hit again in 1936 with the central and western states getting the brunt. Some of the southern states were also affected.

DUST STORMS . . . county agents met the crisis.

By 1937 all counties of agricultural importance had county agents. Agents were helping farmers directly, and in cooperation with other agencies, in national large-scale community land-use planning. Twenty-two hundred county planning committees were formed.

Extension agents in New England helped farm people recover from the devastating hurricane, September, 1938.

The Years 1938-1943

Enrollment in 4-H Clubs in 1938 was over 1,286,000. Cooperation with other agencies of Government gave county agents and other extension workers the opportunity to strengthen their work of helping farm people in soil conservation and better balanced farming.

By 1940 there was war abroad and drought at home. Mechanization of farming was accelerating.

Hybrid Corn Takes Hold

The National Defense Program of 1940 had wide implications for agriculture. Food for defense was the aim. Extension helped inform rural people of defense developments, including inflation control, and of needed adjustments. There was a big swing to hybrid corn.

In April, 1941, the U. S. Department of Agriculture announced the Nation's food needs and goals. Extension quickly shifted its main emphasis to the achievement of these goals.

Extension was asked to take the lead in the Nation-wide victory garden program that was inaugurated following the attack on Pearl Harbor.

In 1942 the neighborhood leader system was set up by extension so that urgent information affecting farm people, and vital to the Nation's total war effort, could be quickly carried to all farms.

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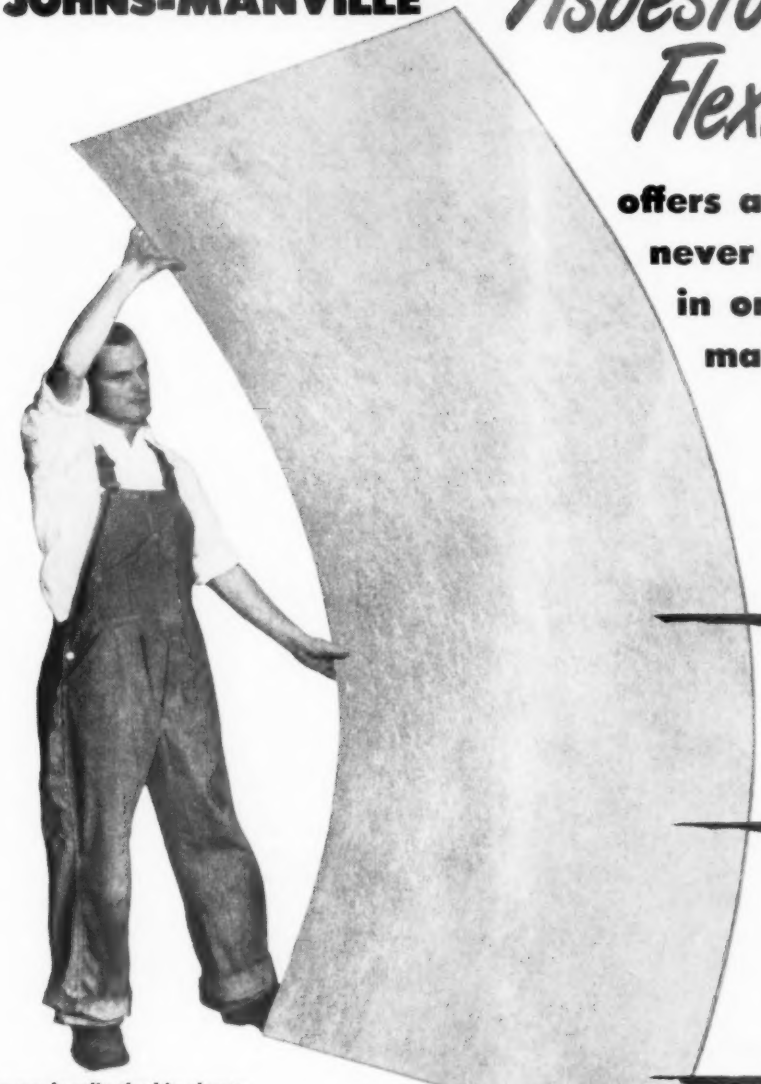
JOHNS-MANVILLE

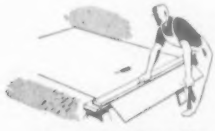
Asbestos Flexboard

offers advantages never before combined in one building material.



One man can handle the big sheets

Easy to nail



Easy to handle

Strong and tough

Asbestos Flexboard answers a thousand building needs

for the home, for the factory, for the farm!

IT'S DIFFICULT to appreciate the many advantages of Asbestos Flexboard until you have used it. It wears like stone, it's light in weight, and it can be flexed to fit curved surfaces. On the job, ordinary hand tools are used to work Flexboard and customary construction methods are followed. It can be applied horizontally or vertically, and can be nailed close to the edge without drilling.

Made of asbestos and cement, Flexboard is fireproof, won't rot, rust or corrode, resists rats and termites. Large 4′ x 8′ Flexboard sheets come in 3 thicknesses—⅛″, 3/16″, and ¼″. Flexboard has an attractive stone-grey color with a smooth hard surface that needs no other finish. As soon as it is in place, it is ready for years of maintenance-free service.

For more information about Asbestos Flexboard, write Johns-Manville, Box 60, New York 16, N.Y.

JOHNS-MANVILLE JM PRODUCTS **Johns-Manville**

This kind of truck works for the farmer!

It hauls the farmer's own products to market. Takes the grain, livestock and produce to elevator, stock yards and other places to which the farmer sells direct.

This kind of truck works for the farmer, too!

It hauls the products made from what the farmer grows and raises... the manufactured and processed products. It's truly a "farm" truck. Without these inter-city trucks the farmer's market would shrivel and die, for today fully ⅔ of all tonnage in America travels by trucks. That's why *all* trucks are truly "farm" trucks. When the inter-city trucks roll the farmer prospers.

AMERICAN TRUCKING INDUSTRY
American Trucking Associations, Washington 6, D.C.

Extension organized and trained 650,000 farm men and women to carry out this task.

Beginning with 1943, and operating under emergency legislation passed by the Congress, the Cooperative Extension Service took on the responsibility for the establishment and operation of a wartime farm labor program adequate to insure the magnitude of food and fiber production required by the war effort. More than 4 million farm labor placements were made that year through the 12,000 recruitment and placement offices operated by the State Agricultural Extension Services. Special Victory Farm Volunteer (youth) and Women's Land Army programs were organized.

The Years 1943-1948

In 1943 there were over 1,639,000 youth enrolled in 4-H Clubs.

During this period 4-H Club members collected 400 million pounds of scrap metal and bought or sold over 200 million dollars' worth of war bonds and stamps. Club members in each of about 30 states sold enough bonds, through state 4-H projects, to purchase one or more Liberty ships, as well as a number of bombers, ambulances, Red Cross station wagons, and jeeps.

Within the compass of a short article it is not possible to list all the contributions made by county extension agents and other extension workers to the Nation's total war effort. It should be realized that the job was done under severe handicaps: Many highly trained extension workers joined the Nation's armed forces; gasoline rationing and tire conservation made it harder for agents to get around their counties.

Food Production First

The drive for food and fiber production, to meet the needs of our armed forces, our civilian population, as well as the needs of our allies, called for intensive efforts. Special programs were inaugurated, such as the eight-point milk production program in cooperation with the dairy industry. Special emergency war food production and conservation extension agents were hired.

The spring of 1945 brought victory in Europe, and a few months later came victory in the Pacific.

The immediate postwar years did not see any let-up in the emergency work of county agents. Nations ravaged by war needed food and fiber and looked to the United States for help.

A decided increase was made in extension work in marketing under title II of the Research and Marketing Act.

The seven-point cotton program was

For more information from advertisers circle page numbers on ad index, page 64

developed in cooperation with the National Cotton Council, 16 other private agencies, USDA agencies, and the land-grant colleges. This program was carried to the producer by county agricultural agents.

By 1947 rural America was calling on extension workers for educational assistance and information in many fields: Land use planning, farm and home planning, home remodeling, farm mechaniza-

FARMERS . . . county agents help them.

tion, better marketing of farm products, as well as information on economic problems and public policy. The American farm home was aware of the vast changes that were taking place in the world. Farm people knew a grave responsibility lay upon America as the dominant power in the world.

Place Foreign Workers

Throughout 1943-47 extension managed all aspects of the domestic farm labor program and handled the placement of foreign workers and prisoners of war made available for farm work. During the 5-year period, 27 million individual placements of farm workers were arranged.

For that entire period, 1943-47, agricultural production exceeded the previous all-time record by an average of more than 8 percent. The production labor needs of the farmers were met in spite of a loss of 1,600,000 skilled farm workers between the 1942 and 1943 crop seasons. At the end of 1947 the farm labor program was turned back to the Employment Service.

The Years 1948-1953

This period was marked by increasing attention to grassland farming.

In August, 1948, a joint committee representing the U. S. Department of Agriculture and the land-grant colleges re-

...LOOKS LIKE I GOT MY TITE-ON ROOF JUST IN TIME"

I'M SOLD ON TITE-ON SHINGLES, TOO. THEY'RE NOT ONLY GOOD PROTECTION, BUT THEY'RE ATTRACTIVE AS WELL. I LIKE THE RICH COLORS AND BASKET WEAVE DESIGN.
Tite-Ons lock together into a one-piece roof. 4 concealed nails fasten each shingle to roof deck.

The RUBEROID Co. ASPHALT AND ASBESTOS BUILDING MATERIALS

Tite-on Shingles

The RUBEROID Co., Dept. A, 500 Fifth Ave., New York 36, N. Y.
☐ Please send free booklet on Ruberoid Tite-On Shingles.
☐ I am interested in shingles for new roofs. ☐ Re-roofing.
NAME.....
ADDRESS.....
TOWN..... STATE..... (BFM-9)

Here's Why

Morton Trace Mineralized Salt protects your livestock profits

IN a period when feed and labor costs are up and livestock prices down, farmers are faced with the problem of maintaining normal profits. The answer lies in better feed conversion.

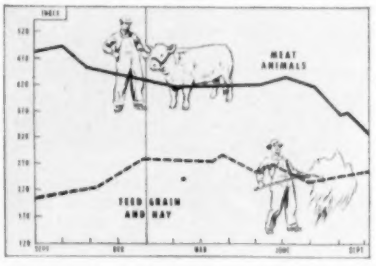
By keeping Morton Trace Mineralized Salt before livestock every day, farmers find animals make thriftier use of feed . . . gain faster . . . cost less per 100 pounds of gain . . . produce healthier young.

That's because Morton's T M Salt supplies the sodium and chlorine of salt so necessary to good digestion and assimilation; and the trace minerals, iron, copper, cobalt, manganese, iodine and zinc upon which the enzyme, vitamin and hormone functions depend.

These are the functions that control every activity of life . . . the basic activities that convert feed into nutrients and in turn, build the nutrients into meat, milk and wool.

When the enzyme, vitamin and hormone functions react properly, livestock get more value from the grains, grasses and forage you give them . . . produce bigger, healthier young . . . finish faster . . . cost less.

The result is more profit for you . . . even in the face of rising feed and labor costs. So, for fast, healthy livestock gains and more vigorous young, feed Morton Trace Mineralized Salt to all your animals — beef, dairy cows, hogs and sheep. Your dealer has Morton T M Salt in stock. Ask for it by name — feed it free choice.



This chart shows what has been happening to livestock — production costs up, market prices down. The solution is more efficient feeding for better use of feed and faster, more economical gains to widen the spread between costs and prices. More and more farmers are finding that Morton's T. M. Salt plays an important part in efficient feed conversion. The cost is only a few cents more per animal per year than salt alone.

MORTON *Free Choice*

TRACE MINERALIZED SALT

for Healthier, Thriftier Livestock

FREE . . . This 32-page booklet gives you complete facts on feeding salt and trace minerals to all classes of animals. Mailed Free and postpaid. Morton Salt Co., P. O. Box 781, Chicago 90, Illinois.

ported the results of an intensive study and recommendations on programs, policies, and goals of Cooperative Extension work.

County agents, state extension specialists, and the U. S. Department of Agriculture were called upon by farm people for farm building plans fitted to this technological age.

Study Youth Needs

Further attention was given by extension to more fully meeting the needs of young men and women.

In September, 1950, the Point IV technical assistance program was launched. A number of extension workers took overseas assignments to help both developed and underdeveloped countries establish extension services to fit the needs of these areas—to bridge the gap between research and the farmer. Agriculturists from other lands came to the United States to see and observe American agriculture and the functioning of the Cooperative Extension Service.

When a man begins to understand himself, he begins to live; when he begins to live he begins to understand his fellowmen.

4-H Members Increase

As we close this brief and sketchy review history of 25 event-packed years of Cooperative Extension Work, we note that enrollment in the 4-H Clubs is now well over the 2 million mark. Notable, too, was the incorporation in November, 1948, of the National 4-H Club Foundation, and the purchase by the Foundation of a National 4-H Club Center and its dedication February 14, 1951.

We note that the concept of balanced farming continues to find more and more acceptance. Another significant trend is the growing interest of rural people in public policy matters.

Agents Help Millions

Today, in 1953, county extension agents as well as other extension workers are busy helping farm people with immediate as well as long-range problems. Throughout these past 25 years one can see the basic pattern of extension work—helping people to help themselves—in operation.

Whether the times be troubled or untroubled this form of out-of-school education of adult and youth has met the test. With a philosophy founded on a deep faith in the ability of farm people to help meet their problems if they have and understand the facts, there is no reason to believe that in the years ahead it will not prove equally valid.—*End.*

For more information from advertisers circle page numbers on ad Index, page 64

The Poetic Evolution of a County Agent

It is seldom that the attitude and perspective of a county agent may be judged and compared through the medium of verse. However, when two different poems are analyzed, written by a former county agent from North Dakota 30 years apart, it is rather interesting to observe the contrasting trend of thought.

The poem entiled "Do You Know Your County Agent?" was written in 1921.

After 30 years, many of the early hopes have been fulfilled as revealed by the poem entitled "A Full Score Years and Ten."

It is rather ironical that the evolution in the point of view has been so unwittingly portrayed in this manner. The alpha and omega, the beginning and the end, of 30 years service as a county agent.—*Amy G. Cowing, Educationist, USDA.*

Do You Know Your County Agent?

Do you seek your County Agent,
When you're troubled, sick and blue,
Do you know that he is anxious
Just to lend a hand to you?

Do you cheer your County Agent,
Ever shake him by the hand:
Show you're thankful for his efforts
Let him know and understand?

Do you use your County Agent,
Do you give the man a show
Does your farm present no problems
That perplex your neighbors so?

Do you know your County Agent
And the things that he can do,
Have you seen the demonstrations
Of the crops your county grew?

Do you tell your County Agent
When you make a trial test
Of a crop that proves successful
So that he can tell the rest?

Do you see your County Agent
When in doubt as what to plant,
Do you guess that he might help you,
Or convinced he surely can't?

Do you feel your County Agent
Cannot do a thing for you?
Why not write him, call or see him
Just to learn what he can do?

A Full Score Years and Ten

We come to the close of careers one by one
And timidly query, "How well have we done?"
The thoughts of near pitfalls we traversed and passed,
The joys and the sorrows, the mem'rys that last,
The youngsters, their elders—both women and men—
Recall ever fondly a score years and ten.

We think of associates trusted and true,
Their kindly endeavors were more than a few,
The colleagues who left us—mid sorrow and tears—
Bereaved by their passing in such early years;
The grim silent Reaper had gathered them, when
We plodded on forward a score years and ten.

(*Continued on page* 37)

8

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THIOPHOS® Parathion Insecticides . . . for broad, low-cost protection against more than 100 different insects, on more than 50 different crops.

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Senators Hoke Smith, left, and Dudley M. Hughes, co-authors of the Smith-Hughes Act in 1917.

H. C. Groseclose, left, first national FFA executive secretary and C. H. Lane, first national FFA adviser.

J. A. Linke, chief of the agricultural education service, 1934-41 and W. T. Spanton, present chief and national FFA adviser.

FFA—25 Years Old and still GROWING!

By A. W. Tenney
National Executive Secretary
Future Farmers of America

● LIKE BETTER FARMING METHODS, FFA celebrates its 25th anniversary in 1953.

It was on November 20, 1928, that a small group of vocational agriculture students and their leaders met in the old Baltimore Hotel, Kansas City, Mo., to formally adopt a constitution for the national organization of Future Farmers of America.

There had been many years of development preceding that organizational meeting. Local organizations of vocational agriculture students had been formed as early as 1919 and 1920, and state associations before 1924. Formation of the national organization was simply the logical development of a movement that had begun many years earlier.

Now, after 25 years, we can look back to count the progress that has been made. The score is good. The baby of 1928 is now a strong and virile organization enjoying widespread support and respect. From a few students in a few states, in 25 years the FFA has spread out to blanket the 48 states, Hawaii, and Puerto Rico. The last count on active dues-paying membership was 352,916, and still climbing.

Develop Specific Purposes

In the early development of FFA the primary aim of the organization was set as the development of agricultural leadership, cooperation, and citizenship. A list of 12 specific purposes was evolved. Throughout the years, the "Aim and Purposes" has been printed in FFA's Official Manual and displayed by charts hanging on the walls of vocational agriculture classrooms. The attainment of the "Aim and Purposes" has been FFA's success.

Ten of the 12 purposes speak directly to the improvement of the individual farm boy. Let me give you one vocational agriculture teacher's account of the improvement that has been made:

"When I first organized a chapter of the FFA in our school the farm boys, because of their natural shyness and work at home, were almost totally 'outsiders' in regular school activities. When the town kids heard about the Future Farmers, they promptly re-named them the 'Future Boneheads.' "

"Things have changed since those days," he went on. "When my boys got a little experience in parliamentary procedure, and speaking, and working together, they started entering into other school activities. Now, most of the school class offices are held by FFA members. The FFA chapter is recognized as the school's most important student organization."

FFA Provides Experience

The regular courses in vocational agriculture provided the basis for sound training and establishment in the business of farming. FFA provided the participating experiences leading toward development of leadership, citizenship and cooperation, and stimulated the interest of the boys in their study of agriculture and establishment of farming programs.

It was a sound program—the kind that could lead to success.

FFA was blessed in other ways. Well-trained, enthusiastic and hard-working men characterized the vocational agriculture teachers who led the local chapters. State and national adult leaders were cut of the same cloth. Most of them had been raised on the farm, often under circumstances of adversity. Their determination to make life better for farmers of the future was almost a religion.

Probably the greatest single contributing factor to FFA's success over the past 25 years has been the fact that its adult leaders, on local, state and national

D. M. Clements, left, started what probably was the first state FFA camp and E. M. Tiffany, author of the FFA creed.

John Farrar, left, present public relations director and Dowell J. Howard, present treasurer of the FFA.

Leslie Applegate, left, first president of the FFA and the 1953 president, James Dillon.

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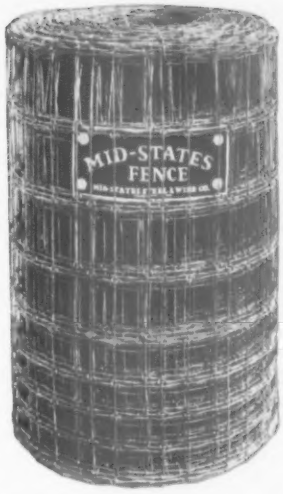

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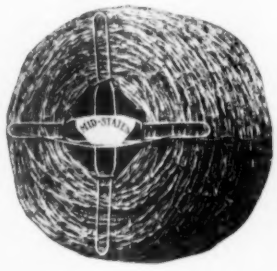

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levels, have been men with special training and preference for the profession. Their primary interest in life has been to help farm boys develop the skills and knowledge they needed to become successful farmers and good farm citizens.

Need Trained Men

There was first the need for training young men in agriculture. Then came the practical program, based on the Smith-Hughes Act of 1917, and supplemented by subsequent acts of Congress.

Leadership was scarce at first. But the agricultural colleges set to the task quickly and were turning out many qualified vocational agriculture teachers within a few years after the passage of the Smith-Hughes Act, thus allowing for needed expansion.

HARNESS . . . FFA boys formerly made it.

As vocational agriculture courses were established in the rural high schools, local organizations of vocational agriculture students were formed. Most of such organizations were largely for recreational purposes at first, but instructors began using them as teaching devices to stimulate the interest of students in their vocational agriculture studies and the development of their supervised farming programs.

Students Held Contests

As early as 1919 Henry Groseclose, later to become one of the great FFA organizers, used his agricultural students at Buckingham high school in Virginia to make a survey of agricultural practices and production on 100 neighborhood farms.

In Georgia, departments of vocational agriculture were holding father-son banquets in 1920. Throughout the country, vocational agriculture students were engaging in judging contests. Idaho records statewide judging contests as early as 1920, and Maryland in 1922.

The period following passage of the Smith-Hughes Act to 1924 might be termed in FFA history as the "age of local organization," with the time from 1924 to 1928 designated as the period when many State Associations of vocational agriculture clubs were formed. Following, of course, would be the time of national organization in 1928. There was a period of about five years while states were getting their charters from the national FFA and other states were completing their local organization.

Convention Grew too Big

By 1935 there were 49 state and territorial associations of the FFA, with more than 100,000 members. Rhode Island, the only state without FFA in 1935, did not come in until 1947.

For the first 10 years, national conventions of FFA were held in the old Baltimore Hotel in Kansas City. During much of this time the conventions were considered mostly an outgrowth and sidelight of the "National Congress for Vocational Agriculture Students," a series of judging contests held since 1926 in connection with the American Royal Live Stock Show. As late as 1935 the official FFA convention program was titled: "Eighth National Convention, Future Farmers of America, *A Feature of the National Congress of Vocational Agriculture Students.*"

By 1937, though, the FFA conventions had grown so large that better facilities were needed for the 10th Convention Celebration. Permission was obtained for holding convention sessions in Kansas City's beautiful new Municipal Auditorium. More than 6,000 members, advisors, and friends of FFA registered for the convention. Though only 10 years old at the time, FFA had "come of age."

FFA FOUNDATION . . . industry provided a push.

Any attempt to enumerate all of the steps that were successfully passed by FFA on its way up, or all the men whose contributions to FFA's development were outstanding, would necessitate much more space than this article permits. There have been some milestones, though, that I believe should be mentioned.

First, of course, was the actual organization in 1928, and after that comes the 10th Convention Celebration in 1937, the first really big national FFA convention.

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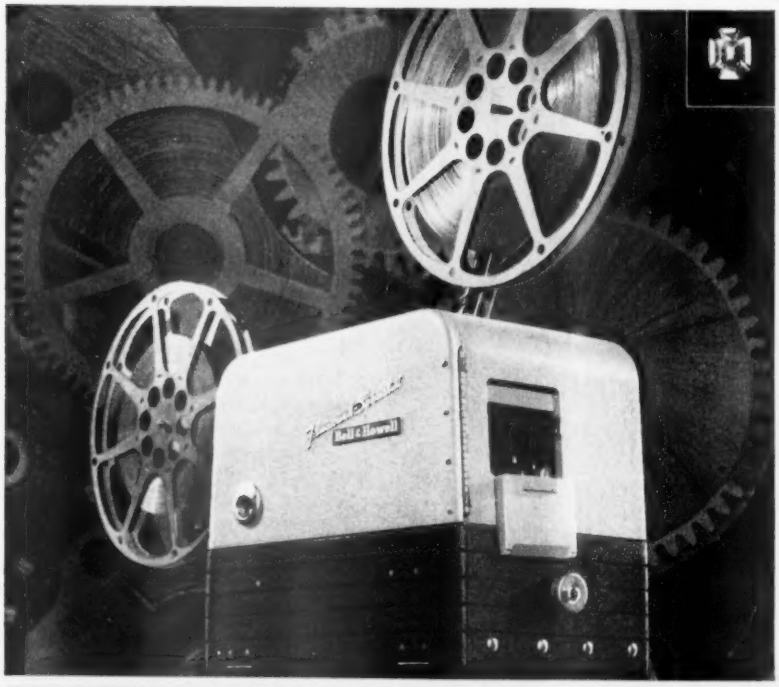

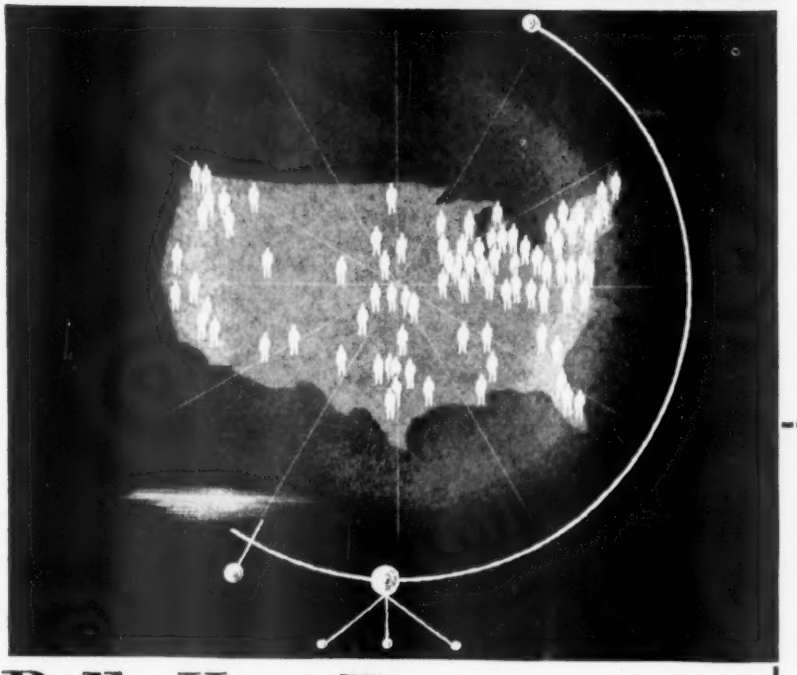

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Testing really gets down to earth at MASSEY-HARRIS

TEST it on the track — prove it in the field — that's the Massey-Harris way of designing more value into every product.

Running a tractor through a tank of water is probably not the best way to prolong gear and bearing life and protect metal texture, but nevertheless, it's a fast, positive method of learning the effects of rain and other moisture sources on bearing seals, gaskets and operating parts.

The results are reflected in the greater efficiency of Massey-Harris tractors . . . their ease of handling and longer life.

This intensive pretesting is also the reason why Massey-Harris continues to lead with so many worthwhile improvements. Among them over the years are live rear axles in tractors, removable wet sleeves, and light-weight pistons in engines, self-starter as standard equipment on tractors, anti-friction transmission bearings, oil-bath transmissions and many more.

The 3-4 plow 44 you see here won its popularity because it has the power to really lug in the tough spots . . . to stand up under heavy, continuous going . . . to reduce fuel and labor costs — all results of testing on the track, in the laboratory, out in the field.

Massey-Harris owners know the value of this pretesting. They find Massey-Harris products last longer, reduce maintenance and production costs — help build profits. That's why they have confidence in Massey-Harris equipment and look to them first for new and improved machines. The Massey-Harris Co., Racine, Wis.

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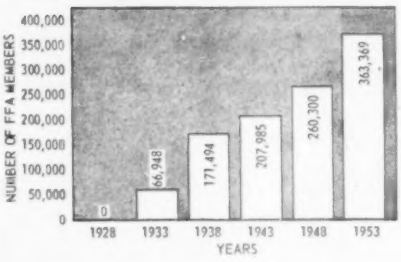
The FFA Scoreboard



In 1938 and 1939 the organization purchased 30 acres of land near Alexandria, Va., for a national camp. Although the war came before original plans for the camp could be completed, the work that was done indicated that FFA members and leaders at that time were confident of the organization's future and were willing to invest its resources in continued expansion and service.

War Closes Some Schools

During the war years, beginning in early 1942, many teachers went to the armed services or to war industries, and schools were forced to close their vocational agriculture departments. But the records written by the remaining Future Farmers in increased food production, scrap collection, and many other war-winning activities spoke well for the Future Farmers. It made possible a quick recovery of membership and even greater interest in the program when the war was over.

In 1944 the Future Farmers of America Foundation was organized to provide a medium through which business and industrial companies, and individuals, could contribute their funds and participate in an award program designed to stimulate the interest of FFA members in their work. Growth of the Foundation was slow, but there are more than 300 donors now.

Their funds have helped to build a better FFA. Their interest has brought a host of new friends—friends who believe in FFA and vocational agriculture, and who will work to keep the program on its way.

Hire Publicity Man

By 1946 FFA was ready for another stride forward—employment of a director of public relations and information to help spread the story of FFA in the newspapers, magazines, and over the radio.

In 1946 more than 12,500 FFA members and their friends attended the big Victory Celebration in Kansas City, making it the largest FFA convention ever held.

The 1947 convention gave the green light to the establishment of the Future Farmers Supply Service to obtain and

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make available to members the various official items of merchandise such as jackets, ties, T-shirts, and others. Last year, the Supply Service sold more than 40,000 jackets to FFA members throughout the country.

That same 1947 convention voted to start "National FFA Week," a period during the week of George Washington's birthday each year in which local chapters and members would engage in special activities designed to call the public's attention to FFA. "FFA Week" has emerged as an important public relations activity.

By 1948 the FFA Convention and the American Royal Live Stock Show had grown so large that Kansas City simply didn't have the facilities to hold both of them at the same time. After 20 years of conventions held in conjunction with the Royal, FFA changed its dates to avoid the conflict. FFA conventions now are held the week preceding the Royal, permitting members who have a special interest in the live stock show to attend both events.

The question of success or failure is in the hand of God; all that we can do is to release the spirit of truth.
—Gandhi

Issue Calendar in '49

The first national FFA calendar was issued in 1949 by the Osborne Company, Clifton, N.J., through special contract made between the organization and the company. Last year, more than 300,000 FFA calendars were distributed throughout the country.

In 1950 the Congress of the United States passed, and the President signed, Public Law 740 giving FFA a special Charter of Incorporation issued by Congress, attesting to the prestige that FFA has won through its many years of accomplishments.

October, 1952, saw the publication of the first issue of *The National FUTURE FARMER Magazine*. Still in its first year, circulation in the magazine already has passed the 100,000 mark, well on the path to full success and fulfillment of the desires of FFA members for many years to have their own magazine in which they could read about the accomplishments of their fellow members throughout the nation.

Finally, and this one was just released a few weeks ago, the Post Office Department has announced that it will print a special FFA postage stamp in 1953 in commemoration of the organization's 25th anniversary. Time of the special stamp issue has not yet been worked out, but it probably will be set to coincide with the 25th Anniversary Convention, Kansas City, October 12-15.—*End.*

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6 PLANT FOODS
all crops need for
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Field tests have proved repeatedly that most soils lack and all crops must have these SIX plant foods. That's why every ROYSTER analysis contains all six in chemically-controlled and guaranteed amounts. Here's how they help all crops.
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And here's VISUAL PROOF why the 6 Plant Foods guaranteed in ROYSTER'S pays off!
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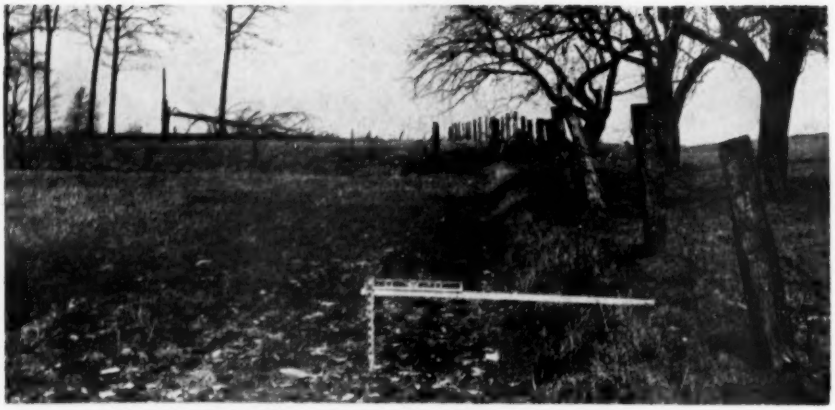


EROSION . . . it took the soil and left the stones.

Launched during the depression . . .

Soil Conservation Service Achieves National Success

By Robert M. Salter
Chief, Soil Conservation Service
U. S. Department of Agriculture

● IT WAS IN the period 1928-1933 that our soil conservation program got started. Dr. Hugh H. Bennett focused public attention on the damage that erosion was doing to American agriculture, and he persuaded the Congress of the United States to initiate an intensive program of research on soil erosion.

The year 1928 marked the beginning of the conservation movement which has since spread across our land.

Two events of major importance to agriculture, and unique in our history, are recorded as belonging in that year. For one thing, a special educational effort was made in the United States Department of Agriculture to stimulate interest in the problem of soil erosion. A bulletin, "Soil Erosion A National Menace", was published giving the first comprehensive appraisal of the problem. This bulletin aroused considerable public interest.

Congress Launches Program

In the last month of the same year, Congress adopted the Buchanan Amendment to the Agricultural Appropriations Bill and, as it turned out, launched a nation-wide program to save America's agricultural land from impoverishment.

The Amendment provided federal funds to (1) set up regional experiment stations for measuring the rates of soil and water losses; (2) make surveys to determine the extent of damage by erosion and location of the principal areas affected; and (3) to work out methods of control and prevention. Ten stations were established.

Research was started quickly, not only on the 10 erosion stations but at many state agricultural experiment stations. Scientists made both field and laboratory studies and tried out a great variety of soil treatments and plant covers, as well as many engineering devices, to learn their values for halting erosion.

By the end of 1932, more than 100,000 quantitative measurements had been completed to develop a store of fundamental data on soil and water losses under different conditions of land use on representative farm lands throughout the country. Results of this research formed the foundation for the national soil and water conservation program.

The Years 1933-1938

During this period our national program of action was started to protect the Nation's soil resources.

Until 1933, there was no national action program in the field, although research activities at federal and state experiment stations had removed all doubt of the seriousness of soil erosion and other types of damage to the land in relation to the continuing welfare of American agriculture.

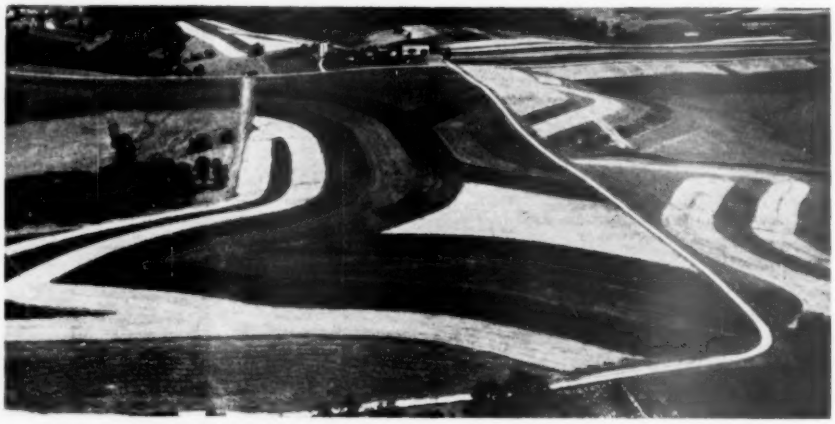
Drought was beginning to grip the Great Plains. Farmers were having to leave land no longer productive and search for new homes and new work. And the nation was in the depth of an economic depression.

Allocate Relief Funds

Accordingly, a provision authorizing use of emergency relief funds for erosion control work was included in the National Industrial Recovery Act signed by the President in June, 1933.

Shortly thereafter, on September 19, the Soil Erosion Service was established by the Secretary of the Interior in his Department and was allotted funds by the Public Works Administration to carry out a program of conservation of soil resources. Hugh H. Bennett was appointed director of the service.

Hugh H. Bennett

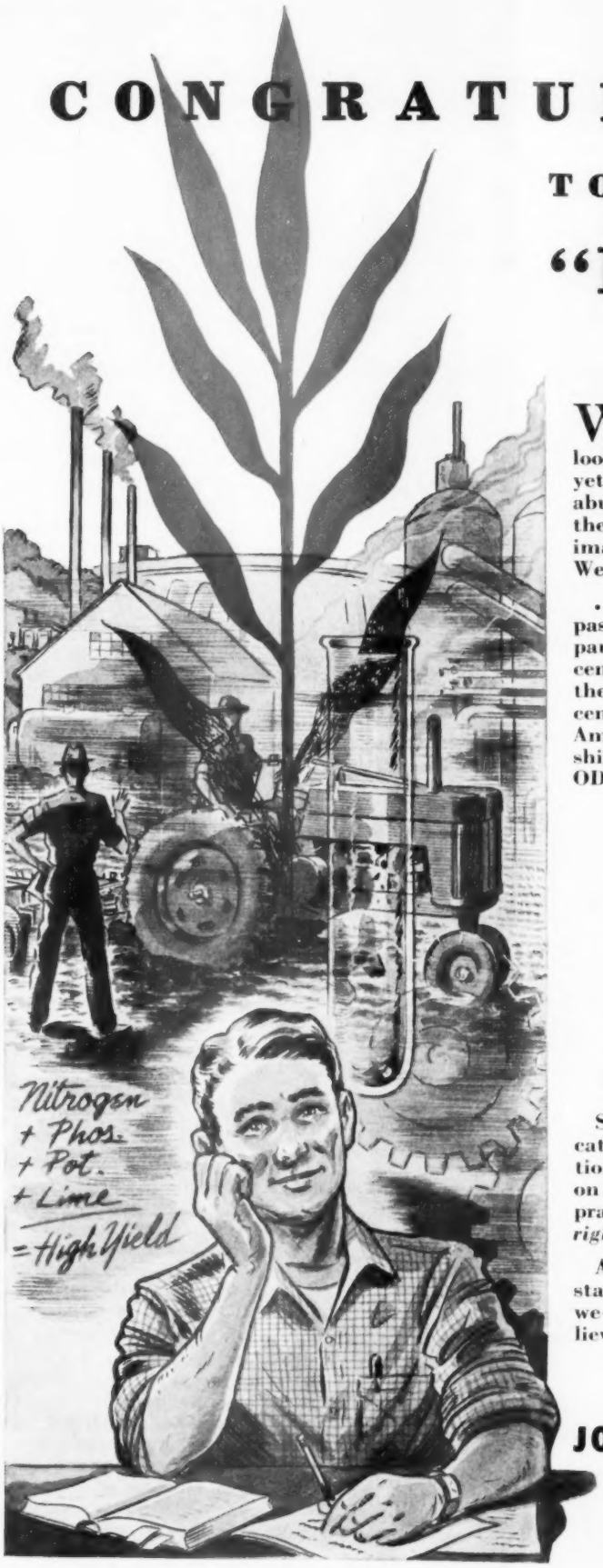


CONTOUR STRIP FARMING . . . soil was saved, farmers benefited.

CONGRATULATIONS

TO THE

"DO-ERS"



WE AMERICANS are a nation of forward-looking people. The unknown future, frontiers yet unconquered, better ways to cut costs, abundant living, fortunes yet undiscovered—these are the things that capture the heart and imagination of a young and growing country. We are still that kind of a people . . .

. . . but, also, we are old enough to have a past, a host of achievements which merit the pause for reflection. Among them are a half-century of farm and home demonstrations by the Agricultural Extension Service, a quarter-century of building by the Future Farmers of America, and—closely allied with such leadership—25 years of BETTER FARMING METHODS.

THE DO-ERS

Dr. Seaman A. Knapp said: "*What a man hears, he may doubt; what a man sees, he could doubt; what a man* DOES, *he cannot doubt.*"

Future Farmers have demonstrated that "learning to *do*, *doing* to learn, earning to live, and living to serve" is an echo, with modulation of overtones, of Dr. Seaman's Extension Service philosophy.

So it is, also, with many other American educational organizations, societies, and institutions of whatever kind or name. All are founded on the philosophy of prompt *action*, on the pragmatic idea of *do it*, *do it now*, and *do it right*.

As a pioneer of 117 years, John Deere understands this philosophy of the *do-ers*. So long as we—all of us—retain this pioneer spirit—we believe America's future is assured.

JOHN DEERE • MOLINE, ILL.

JOHN DEERE QUALITY FARM EQUIPMENT

Quality Farm Equipment Since 1837

Left—untreated onion; Right—treated with MH-40

Naugatuck nips storage growth in bud!

The United States Rubber Company's Naugatuck Chemical Division has good reason to believe it has dealt a death blow to destructive storage growth. The reason is a new Naugatuck chemical—a water-soluble salt containing 40% maleic hydrazide and called MH-40.*

Every grower knows the advantage of storing away part of a crop like onions until the market is more favorable. And every grower also knows the risk involved—namely, the sprouting, shriveling and wrinkling which can make that crop unsalable.

As far back as 1947, Naugatuck's research scientists came up with the first version of MH-40. Since then, working in cooperation with more than 250 experiment stations and other agriculturists, they have discovered hundreds of potential uses for this unique new chemical. One of these uses was for the inhibition of storage growth.

Today MH-40 is commercially available as a grass inhibitor and wild-onion killer. And it won't be long before it will be made available as a storage growth inhibitor, too! *U. S. Pat. No. 2,614,916

MH-40 is one more example of Naugatuck know-how at work, always striving to introduce new and better products to the agricultural field.

UNITED STATES RUBBER COMPANY
Naugatuck Chemical Division, Naugatuck, Conn.
producers of seed protectants, fungicides, miticides, insecticides, growth retardants, herbicides; Spergon, Phygon, Aramite, Synklor, MH, Alanap.

The principal functions of the newly established Soil Erosion Service were to set up erosion control demonstrations, and to make surveys to accumulate the necessary information on the erosion problem as it affected the national welfare. Soon the staff was assembled, training courses were started, and the first soil conservation demonstration was laid out.

The Coon Creek Watershed Demonstration Area in Wisconsin was officially certified in October, 1933. One day in January, 1934, a farmer, Ben Einer, walked into the small Soil Erosion Service office in Coon Valley and announced that he wanted to sign an agreement permitting soil and water conservation practices to be applied to his eroded farm in the demonstration area. He was the first farmer cooperator in the national soil conservation program.

CCC BOYS . . . they aided the cause.

By the middle of 1934 about 40 demonstrations were underway, covering 4,000,000 acres in 31 states. The areas varied in size from 25,000 to 200,000 acres. Many farmers, once they saw the conservation practices actually on the ground and understood the benefits to be had from using the land the conservation way, were ready to follow in Ben Einer's footsteps.

Also, during this period, about 50 Civilian Conservation Corps camps were assigned to erosion control work with the Soil Erosion Service. The labor supplied by the "CCC boys" was a contribution of very great value. Many of the eroded areas they planted to trees are now fine forests producing timber, and the millions of check dams they built stopped vast losses of soil and water by way of big gullies.

Solve Land-Survey Problem

The problem of surveying the land to determine relationships between soil damage and the various conditions of soil, slope, climate, and methods land use was largely solved during the 18-months life of the Soil Erosion Service. After intensive studies and trial surveys, the "conservation survey" was developed and adopted as a device for accumulation of soil-vegetation-water-land use information required for farm planning.

During 1934, a reconnaissance erosion survey was made of the entire United States. Evidence of accelerated erosion in varying degrees, from slight to severe, was found on more than half of the land of the country.

Transfer Service to USDA

On March 25, 1935, the Soil Erosion Service was transferred from the Department of the Interior to the Department of Agriculture, by administrative order of the President. Two days later, the Secretary of Agriculture ordered consolidation of all erosion control activities of the Department.

Thus the agency was expanded to include the erosion control experiment stations, and also the erosion nurseries of the Bureau of Plant Industry where valuable work was in progress to develop grasses, legumes, and other plants specifically for soil improvement and soil and water conservation.

During this period several Congressional committees were considering legislation to create a permanent federal agency for soil and water conservation. The result was the Soil Conservation Act, passed by both House and Senate without a dissenting vote, and approved by the President on April 27, 1935.

This law made soil and water conservation the business of the people. It established within the Department of Agriculture and Soil Conservation Service for the development and prosecution of a long-time program of soil and water conservation. It authorized an action program to develop conservation measures and apply them for the healing of damaged soils and prevention of further damage to farm and ranch land.

Authorize Payments to Farmers

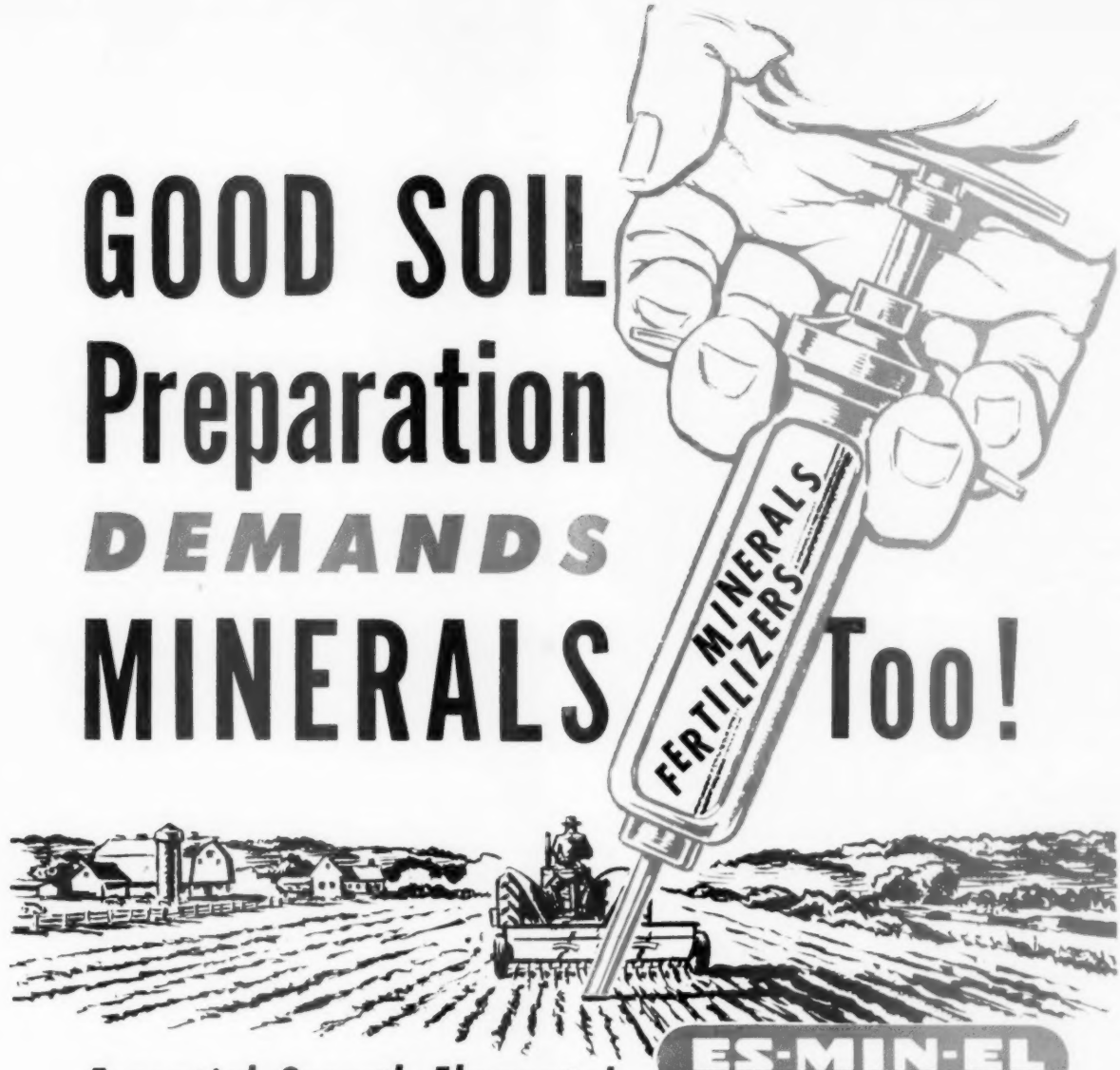
The Soil Conservation and Domestic Allotment Act was passed by Congress in 1936, authorizing payments to farmers to encourage and assist them in adoption of certain soil conservation practices. In this program the use of lime, fertilizers, cover crops, and other soil improving practices was emphasized, with the result that soil amendments became an important feature of soil conservation.

During this formative period, many people began to feel that soil conservation could be speeded up by giving greater responsibility to farmers themselves. As a result of this thinking, the President, in February, 1937, submitted to the governors of all states a standard state soil conservation districts law, with suggestions that legal authority be given farmers and ranchers to organize districts specifically for conservation of soil and water resources.

Legislatures of 22 states passed such

For more information from advertisers circle page numbers on ad index, page 64

GOOD SOIL Preparation *DEMANDS* MINERALS Too!



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laws that year. The first soil conservation district was chartered August 4, 1937. It was the Brown Creek Soil Conservation District, Anson county, North Carolina —the first of its kind in history.

The Years 1938-1943

This was the period of preparing the way for local people to take upon themselves the responsibility for the soil conservation program. Nearly all states passed soil conservation districts laws and nearly a thousand districts were organized.

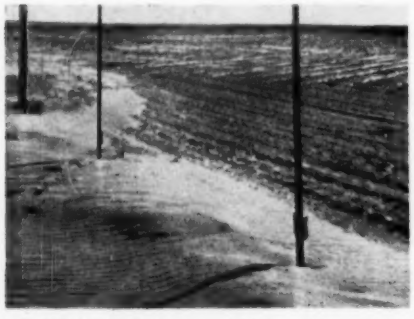
Farmers in the districts began an entirely new cooperative endeavor, with improvement of land conditions the prime objective. They started working and planning for soil conservation. They banded themselves into community groups to speed the work, lending one another tools and labor, and in other ways developing a high type of cooperation along with much enthusiasm for the work of improving their land.

Conservation Makes Gains

During World War II, when all activities were geared to the emergency, some feared farmers would suspend their conservation work. But, instead, they redoubled their efforts in order to maintain and increase soil productivity while taking immense war crops from their fields.

Farmers took readily to contour planting during this period. The stubble-mulch type of farming appeared on several hundred thousand acres in the Plains states and in wheat areas of the Pacific Northwest to conserve moisture, prevent wind and water erosion, and increase per-acre yields.

Many civic groups and individuals began supporting the soil conservation program. In 1940, the Society of the Friends of the Land was organized. In 1943, the more scientific Soil Conservation Society of America was started. These societies, the first of their kind, have since expanded in numbers and good works and are recognized as important influences in fostering conservation of land and water resources by individuals, cooperative groups, and governments.



DRIFTING SOIL . . . problem was to check the causes .

Industry Aids Conservation

The early war period saw also the beginning of sponsorship and support of soil conservation by business and industry in the United States.

In 1942, 25 young agriculture scientists from Latin American countries arrived for a year of study and experience with the Soil Conservation Service and farmers in districts. This was the start of the "foreign trainee" program that has since prepared soil conservation leaders for some 50 other countries throughout the world.

The Years 1943-1948

During this period farmers and ranchers assumed more responsibiilty for local soil and water conservation programs.

By July 1, 1945, all 48 states had enacted soil conservation districts laws. Puerto Rico and the Virgin Islands passed such laws in 1946, and Hawaii and Alaska in 1947.

Farmers were organizing districts at the rate of about 200 a year. Representatives of soil conservation districts from 32 states met in Chicago, July 24, 1946, and organized the National Association of Soil Conservation Districts, "to further the organizing and functioning of soil conservation districts in the United States."

Conservation Acres Grow

June 9, 1947, was "Billion Acre Day". On that day the San Juan Soil Conservation District in Colorado was chartered, bringing the total land in such districts to one billion acres. Local people were rapidly accepting responsibility for soil conservation.

Many states began making special appropriations to help their soil conservation districts during this period. Evidence of greater public interest was seen in the many soil conservation field days that were held in nearly 200 different communities by the end of 1948.

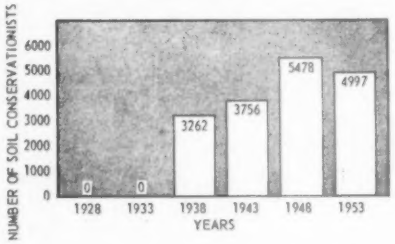
Soil conservation education was becoming a major function of state extension services; and schools, churches, and youth groups were asking for assistance in planning study courses in the subject. Land Grant Colleges of 13 states had established courses providing for a degree in agriculture with a major in soil conservation, while 71 other colleges and universities had included the subject in their curricula, for the training of soil conservation specialists.

The Years 1948-1953

The last five years have been a time of steady progress to spread soil and water conservation to more and more land.

In general, a broader understanding of soil conservation as a well-rounded science of the use and improvement of land, and effective in helping to increase and maintain agricultural yields, was the most significant trend in connection with the program. An encouraging feature was the emphasis placed on improvement of soil structure, soil fertility, and the waterholding capacities of soils for greater crop and livestock production.

Soil Conservationist Scoreboard



In April 1952, Dr. Hugh Bennett retired from public service after 49 years of leadership in the conservation movement. He will forever be known as the father of soil conservation in America, and the world.

All Agencies Cooperate

Various steps taken in the last few years toward closer coordination of soil and water conservation activities of agencies and groups are now beginning to show beneficial results.

The Forest Service and the Soil Conservation Service have been assigned joint responsibiilty for making flood control surveys.

The Extension Service conducts educational programs to further soil and water conservation.

And coordination of the Service's farm planning operations on farms, with the financial assistance program of the Department of Agriculture's agricultural conservation program, has enabled conservation technicians to provide assistance to a larger number of farmers during a year.—*End.*

★

Soil Conservation Society Convention
Colorado Springs, Colorado
November 5-7

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To County Agents and Vo-Ag Teachers, Standard Brands has made available educational booklets, nutritional reviews, and a motion picture—factual material based upon sound research. You will find these educational helps invaluable in your contacts with farmers and feeders.

FREE for Education Meetings

Of particular interest is the 15-minute motion picture RICKETS IN CALVES, based upon research done at Pennsylvania State College. Why not arrange a showing of this informative film soon? You will find it well-suited for FFA, 4-H Club, and farm group meetings.

Details concerning the 16 mm. film RICKETS IN CALVES, a list of educational literature and FIDY Service Helps, or any information about FIDY will be sent promptly on request. Address Desk BF-9, STANDARD BRANDS INCORPORATED, *Agricultural Department*, 595 Madison Avenue, New York 22, N. Y.

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During the past 25 years, adult leadership has seen . . .

4-H Clubs Develop Better Farm Youth

By T. A. Erickson

● THE 4-H CLUBS—something new, something unique in education—were born and grew up in farm life during the last three or four decades.

Time was when farm people prided themselves on the principle "each one for himself"—the independent way of life. But a new idea has entered the rural community, placing a mark of distinction on the family which works with neighbor families in various community activities and in learning and practicing new methods of agriculture and home making.

There isn't a more inspiring story in American life today than that of the 90,000 4-H clubs with their two and a quarter million members, under the leadership of 260,000 local volunteer, unsalaried leaders, all guided and supervised by county, state, and national agricultural extension agents.

Recently, there has been a new interpretation of the early objectives of this youth work, "better livestock, crops and home economics" by adding "for better boys and girls and better living."

New activities have been added to the program—music, recreation, summer camps, conservation and others—which have greatly enriched the early plans and objectives.

The State Leadership

In the story of 4-H clubs, the chapter on state leadership is one of the most interesting.

The early state leaders had to chart a new course for an educational program, with different objectives and details of action. Real life situations in the home and on the farm replaced the book lesson and father and mother took the place of teacher. "Making the Best Better" became the watchword.

Four-H club work has been fortunate in attracting state and national leaders with ability who have been consecrated to the objectives of this new educational program. This strong leadership has brought general understanding and appreciation of 4-H work by rural as well as urban citizens.

The unselfish spirit of members as well as leaders has given worldwide acclaim to 4-H ideals. It has been the source of good will in all of our social units—family, community, state and nation.

Leaders in Kentucky have given many years service to 4-H. Left to right are, E. E. Fish, J. W. Whitehouse, state leader since 1924, Miss Edith Lacy, and standing, G. J. McKenney.

Leaders Were School Workers

Many of the pioneer 4-H leaders were school workers, where they had become enthusiastic for the new ideas of practical education in rural life presented by such men as Dr. Seaman Knapp, Liberty Hyde Bailey, and others.

Some of them had been superintendents of county rural schools. Among these were O. H. Benson of the U. S. Department of Agriculture, and state leaders, George Farley, Mass.; E. C. Bishop, Iowa; A. B. Graham, Ohio; Otis Hall, Kansas; T. A. Erickson, Minnesota; and others.

It is very significant that so many of these early state leaders remained in the work 25 years or more. At the 1951 National 4-H Camp, the following 20 retired state leaders were given the National Honor Award for 25 years or more of service to rural youth: W. C. Abbott, Louisiana; Edith Barker, Iowa; T. L. Bewick and W. McNeel, Wisconsin; R. W. Blacklock, Florida; A. J. Brundage, Connecticut; G. V. Cunningham, Georgia; G. A. Elcan, Virginia; T. A. Erickson, Minnesota; E. L. Ingalls, Vermont; E. G. Jenkins, Maryland; W. J. Jernigan, Arkansas; Harriet Johnson and I. D. Lewis, South Carolina; W. H. Palmer, Ohio; T. A. Sims, Alabama; H. C. Seymour, Oregon; Z. M. Smith, Indiana; J. E. Tanner, Mississippi; W. J. Wright, New York.

Service Record Grows

A recent statement issued by the United States Extension Service includes the names of 88 members of state 4-H staffs who have been given recognition for outstanding and faithful leadership on a statewide basis for 25 years or more.

Two states deserve special recognition for longtime service records of members of their 4-H staff. In Kentucky, J. W. Whitehouse became state leader in 1924. The following staff members have an average service record of 30 years and are

National 4-H Club Creed for Leaders

"I believe in the good earth, in the beauty and strength of its hills and valleys, its fields and forests, its orchards and gardens, its cattle on a thousand hills.

"I believe in the educational, spiritual, and character-building value of work on the land, in the growing of crops, the raising of animals, the production of flowers and fruits—work with the Creator.

"I believe in the country home where father, mother, and children work and strive together, grow up together, and share in each other's joys, hopes, and faith.

"I believe that out of rural homes come many of the strong, accomplishing men and women of the Nation.

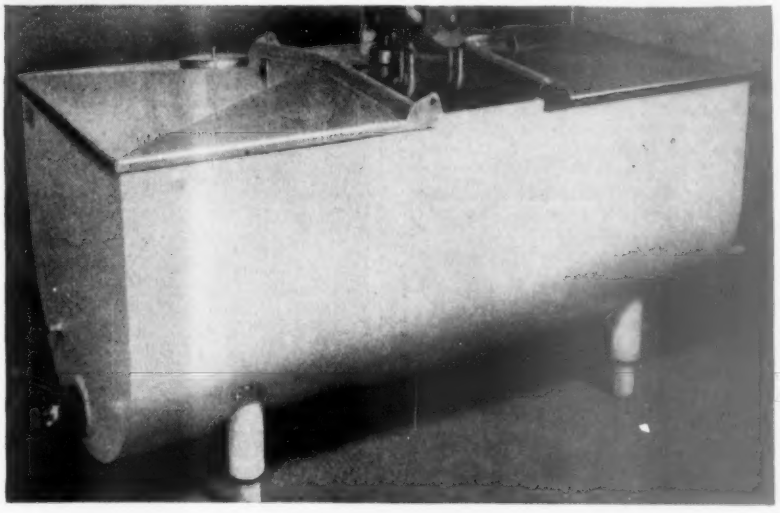
"And because I believe these things, I shall do my best, through 4-H Club work, to help build an efficient agriculture and homes of peace, beauty, and honor all over America and throughout the world."

TAKE A TIP FROM THIS PRODUCER:

WILLIAM SONDERICKER (left) and his son, Ainsworth Sondericker, are thoroughly sold on the many advantages of tanker pickups from their Stainless Steel cooling and holding tank.

"We are producing better quality milk with our Stainless Steel bulk storage tank"

says Ainsworth Sondericker



THIS 200-GALLON Stainless Steel tank on the Sondericker farm cools milk from 20 cows and holds it for every other day pick-up. The Sondericks produce for Dairymen's League Co-operative Association, Inc., Buffalo, New York.

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Ainsworth Sondericker, who, with his father, William Sondericker, operates a 250-acre dairy farm, reports on his first year of operation:

"Our returns are higher because we are producing a better quality of milk. Faster cooling means less bacteria growth and resulting off flavor. A better tasting milk means more will be sold for drinking, thus insuring a better return.

"For three successive years we received an award for not having more than one bacteria count in excess of 100,000 for each year. Since using the bulk tank, our counts have been lowered to around 7,000."

When you change to the bulk handling system with a Stainless Steel farm tank, important savings in time and labor go hand in hand with better quality milk. Clean-ups are always quick and easy and heavy lifting and handling is a thing of the past.

If you are interested in a bulk handling system using Stainless Steel tanks, we will be glad to supply you with information which we have acquired in working with our customers who manufacture Stainless Steel farm tanks. Just mail the coupon below; no obligation, of course.

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still very active: Carl W. Jones, E. E. Fish, Edith Lacy, G. J. McKenney, and M. S. Garside.

In Michigan, A. G. Kettunen has served as state leader for 36 years, with Nevels Pearson, P. G. Lundin, and Kenneth Ousterhous having an average of 30 years. They are still guiding their strong state program.

It is very interesting to note that of the present state leaders, 18 report having been 4-H members, and 62 of the assistant staff members come from the ranks of 4-H members.

The National Leadership

Dr. C. B. Smith gave some of his most helpful philosophy to the 4-H ideals during this period. His "4-H Creed for Leaders" is so fine that it must have a place even in this short article. It appears on the opening page.

Miss Gertrude Warren made her fine contributions to the national program in this period, retiring in 1952. Her "Organization of 4-H Clubs" bulletin has been an important guide of the national program.

GERTRUDE WARREN . . . many years of faithful service.

R. A. Turner has been a part of the national staff the entire 25 years with his faithful service, retiring in 1951, but still continuing his love for 4-H by acting as leader of the local 4-H Club near Evart, Mich.

Ed Aiton Takes Lead

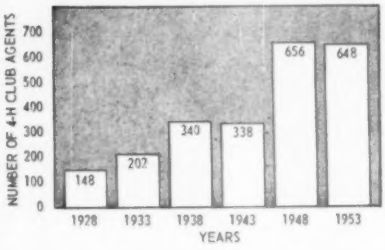
As we try to evaluate what these 25 years have meant, it is very encouraging to look ahead on the national horizon. The new chief, Ed Aiton, has taken Miss Warren's place in the national leadership. His experience as a 4-H boy, local club leader, vo-ag teacher, county agent, and member of the Minnesota state staff, should help him give outstanding leadership in the nation's 4-H program.

George Foster, Norman Mindrum, and other new leaders bring their training and experience to the national level.

During these years, World War II called several state, county, and local 4-H leaders into the service. Among them were state leaders Walker of Washington and Marston of Wyoming.

The war brought after results which again drafted 4-H leaders for important youth service in foreign countries and in the IFYE, which has national and worldwide significance. This list includes outstanding leaders: Varney of Wisconsin; Hoefer of New York; Kettunen of Michigan; Taff of Iowa; Ingwalson of the U. S. Department of Agriculture; and others.

4-H Leader Scoreboard



County 4-H Leadership

These years have seen the county agricultural extension office become the local community representative institution of the state agricultural college and the National Department of Agriculture. It has helped the 4-H club do its share to bring to the local farm neighborhood the results of crop research, experimentation, and demonstration, and better rural living, which have revolutionized agriculture.

The value of the organized club unit, bringing in the value of the group activity, has been demonstrated and accepted as the most successful plan. This feature has included the development of junior leadership, and its use.

Many of the new leaders, including both volunteers as well as county, state, and national paid leaders, have grown up in the work as 4-H members. They are bringing the new ideas and enthusiasm to the work.

The Local Leaders

During the early years of 4-H work most county and 4-H club agents gave the instructions for better practices directly to the individual club member. It took some time to develop the well organized local 4-H club. When we think of the 90,000 4-H clubs under the guidance of 260,000 local leaders supervised by 7,000 county extension agents of 1953, we appreciate the progress made in group organization.

These local 4-H leaders represent the best in community leadership. A recent survey indicated that more than 70 percent of these leaders are parents who are leaders because they love boys and girls. More than 80 percent are outstanding church members, and a large proportion

For more information from advertisers circle page numbers on ad index, page 64

are former 4-H members themselves.

These 25 years of the 4-H program have brought new ideas for better living to the rural community. The summer camp has become an established institution in the 4-H program. This is one of the many wonderful features that is helping farm youth to appreciate, love, and know nature, and to see agriculture as a great vocation.

The 4-H program is developing a voluntary rural leadership which promises continued progress for the objectives of the 4-H clubs.—*End.*

★

County Agent Poems

(*Continued from page* 21)

We've traveled and mingled with old friends and new,
The world's grandest people, substantial and true;
We've learned that the lowly are ofttimes the great,
Pretenders but foster dissension and hate;
We've known the best people wherever we've been,
Enhanced by their splendor a score years and ten.

When backward we're looking and techniques beguile,
'Tis friendships that linger and mem'rys the while,
Reflection on moments of deeds we have done,
The handshakes, the banter, the worries, the fun.
The time was so fleeting, that just now and then
We paused to envision a score years and ten.

A boon for the faithful; a bright setting sun,
A modest recalling of goals that were won,
Appraisal and knowledge of those chosen few
Who made the path smoother for me and for you,
And others who cheered us again and again
As we were amassing a score years and ten.

Both of these poems were written by Ralph C. Newcomer, North Dakota county agent.

★

New Educational Insert

In the July issue of Better Farming Methods, there was printed a new educational insert on "Automatic Controls on the Farm."

This insert is an excellent teaching aid for vo-ag teachers, county agents, and 4-H club leaders. It explains what automatic controls do for the farmer, how they help the farmer, and a comprehensive chart shows the relation of such controls to farm animals, crops, and machinery.

Agriculture leaders can obtain copies of this educational insert by writing to the Minneapolis-Honeywell Regulator Co., Agricultural Division, Minneapolis 8, Minn. or requesting them through the Helpful Booklets Department, Better Farming Methods, Sandstone Building, Mount Morris, Ill.

Write for your copies today.

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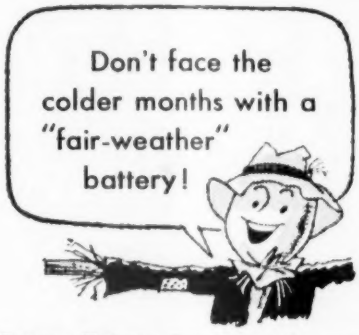
Get Gulfpride H.D. this convenient, new way. It's the Number-1, all-purpose motor oil for farm use. It keeps engines clean—fights corrosion and rust—reduces engine wear.



Battery efficiency decreases as the temperature falls—likewise its capacity to take on a new charge.

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Every Gulf Battery is covered by a warranty and adjustment agreement.

LIFESAVING TIP about tires!

You may not realize it, but the best time to buy new tires for your truck or car is just before the cold, damp weather starts. That's the ideal "break-in" period, if you want extra mileage later on.

Mom—keep the house **fresh as a daisy!**

When you're plagued with household odors, *Gulfmist,* the aerosol deodorizer, comes to your rescue. See how easy and effective it is to use in kitchen, bathroom, all around the house in combatting unwanted odors.

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A 25-year history of . . .

Public School Education In Agriculture

By H. M. Hamlin
Agricultural Education Department
University of Illinois

● THE LAST QUARTER-CENTURY has been prolific with changes in farmers; farming; agricultural businesses, industries, and professions; the public schools; and agricultural education in the public schools. These changes are related and should be reviewed together.

Changes in Agriculture

Growth of interdependence. In 1928, farming was still a fairly simple, individualistic way of life. Herbert Hoover, elected President in 1928, was pledged to deal with the problems of agriculture through a new device, a federal farm board. Its major purpose would be to encourage farmers to work out their collective economic salvation through greater use of cooperatives.

The economic depression of the early '30's brought radical changes in conceptions of the relationships of the federal government to citizens and to agriculture. Farm prices were underwritten; the production of certain products was subsidized; and new agricultural agencies were created.

Ten years after the opening of the quarter-century, Europe went to war. Three years later we joined in the war. For eight years of world war and during all the post-war years, we have been very conscious of our world-wide relationships.

Thus through depression and war, a sense of interdependence with all others in the country and the world, sometimes almost hopeless and sometimes almost hopeful, replaced in the men on farms the feeling of independence.

Farm population changes. There had been a long-time drift from the farm prior to 1928. The depression returned many to the farms. War took away many who had returned and a great many others. During the war, the farms of the United States contributed 1,500,000 men to the armed forces.

Many Part-Time Farmers

War and postwar conditions forced many city workers to look to the country for housing. Many others, who had lived on farms, continued to live on them but worked in cities. The population of part-time farmers became the fastest growing part of our total population and came to constitute about one-fifth of the farm population.

Mechanization. Shortage of farm labor, farm prosperity, and other factors gave rise to the greatest increase in the mechanization of farms that had been seen. More machinery, bigger machinery, and greater investments in machinery changed the practice of farming. In 1928, few farms were electrified; by 1953,

Major Events Affecting Agriculture Education in the Public Schools

1928-32

National Association, Future Farmers of America, organized at Kansas City, with 13 states participating, 1928.

Memorandum of understanding with Agricultural Extension Service developed, 1928.

First set of suggested objectives for vocational education in agriculture drafted, 1929.

Depression began, 1929, reducing scope of program.

***Agricultural Education Magazine* began publication, 1930.**

George-Reed Act, to supplement Smith-Hughes Act, passed, 1930.

1933-37

George-Ellzey Act, replacing George-Reed Act, passed, 1934.

George-Deen Act, replacing George-Reed Act, passed 1936.

Recovery from depression began and expansion of program resumed.

1938-42

Defense training in agriculture provided by Congress in 1940, followed by federal war-training program which continued into 1945.

Peak of prewar program reached in fall of 1941 with 9,054 teachers of vocational agriculture.

Vocational agriculture went on war basis following December 7, 1941.

1943-47

3,782,778 farmers enrolled in war-training programs, 1940-45.

Number of teachers of vocational agriculture fell to 7,121, 1945-46.

Servicemen's Readjustment Act passed, 1944, and adapted to provide training program for farm veterans in 1945.

George-Barden Act, replacing George-Deen Act, passed, 1946.

1948-53

National Association of Vocational Agricultural Teachers formed, 1948.

More than 700,000 farm veterans enrolled in institutional on-farm program, 1945-53.

Number of departments increased to about 10,000.

Great improvement in buildings and facilities.

Discover New Growth Promoter for "Young Life"

Hidrolex†

New Ingredient Being Added to Feeds

*By Fred Bailey**

Research reports indicate that the new growth promoter, Hidrolex, may be another stride in "Young Life" nutrition as spectacular as vitamins or the recent antibiotic wonder drugs.

The growth impetus that Hidrolex gives chicks, poults, pigs and calves results from a new process that "unlocks" palatable, high-energy simple sugars from the lactose (milk sugar) of cheese whey. The manufacturer, Consolidated Products Company, hydrolyzes whey in the presence of a rare enzyme, lactase. The milk sugar is "predigested", changing half into simple sugars that can pass more readily into the bloodstream without taxing the limited digestive capacities of "Young Life".

The new milk sugar ingredient has now been tested on the three Consolidated experimental farms, at state and federal experiment stations, by feed manufacturers who are adding the ingredient to their feeds and in hundreds of field tests. These tests have demonstrated that Hidrolex added to excellent rations produces these results:

Broilers Gain 10% Faster on 10% Less Feed

Broilers on mash containing Hidrolex were marketed at 3 lb. average weight in nine weeks; used 2.6 lbs. feed per pound gain. Controls on same mash without Hidrolex weighed 10% less; used 10% more feed per pound gain. Pullets reached 60% production 2 weeks earlier when Hidrolex was included in range and laying rations.

Market 200-Pound Hogs in Five Months

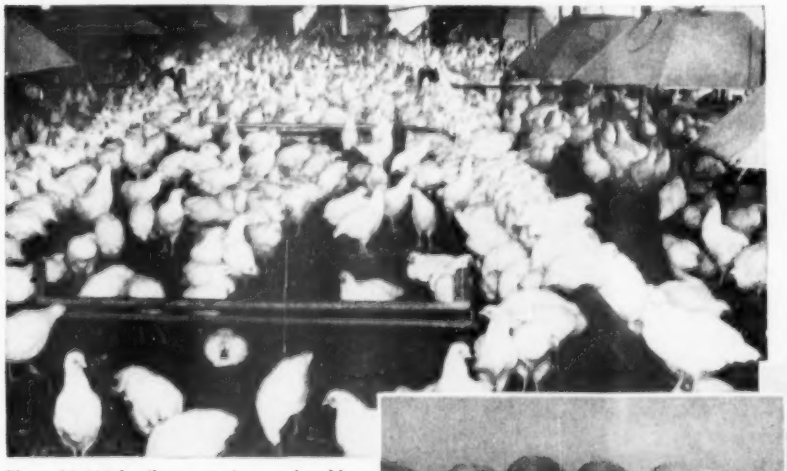
Pigs fed Sparx weaning feed and Pig Emulsion finishing feed (both containing Hidrolex) reached an average weight of 200 lbs. in 5 months. Besides reaching weight a month earlier, the Hidrolex-fed pigs used less than 325 lbs. feed per cwt. gain weaning to market; 15% better feed efficiency than corn-protein standard.

Calves Grow ⅓ Faster than Whole Milk Standard

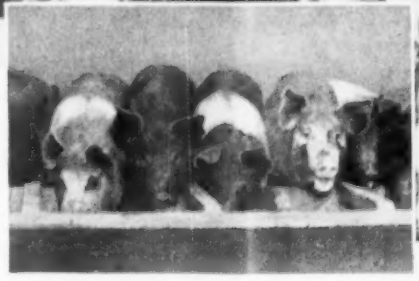
Baby heifers raised on Kaff-A containing Hidrolex averaged 1.45 lbs. gain per day through nursing period. Growth was one-third greater than Ragsdale whole milk standard for same age; 10% more than calves on milk replacer without Hidrolex.

High and readily available energy is one obvious explanation for the amazing growth impetus that Hidrolex gives feeds. Its simple sugars pour energy into the bloodstream at an extremely rapid rate. Increased palatability imparted to the ration by Hidrolex is also a factor in increasing feed efficiency and in health protection. All young animals have a "sweet tooth". The simple sugars in Hidrolex are two to five times as sweet as ordinary milk sugar. Hidrolex increases feed intake for fast growth and keeps sick livestock or poultry eating so they have a good chance for recovery.

Hidrolex is the exclusive discovery of Consolidated Products Company and is currently available in the firm's feeds . . . Kaff-A milk replacer for calves, Sparx, Sow Emulsion and Pig Emulsion for hogs and Semi-Solid "E" Emulsion for poultry. Other manufacturers are adding Hidrolex as an ingredient to their commercial feeds. For complete research data on Hidrolex, and information on how you can secure its benefits for your feeding program write Consolidated Products Company, Danville, Ill.



These 10,000 broilers are nine weeks old. The Hidrolex-fed birds (front pen) averaged 3.12 lbs. with 2.53 lbs. feed per lb. of meat produced. Controls (rear) fed same ration without Hidrolex averaged 2.93 lbs. with 2.83 feed conversion.



These pigs were in a pen that weighed 107 lbs. at 100 days of age, fed Hidrolex in Sparx and Pig Emulsion. Similar growth on 778 experimental pigs has produced average weight of 206 lbs. at 156 days.

Calf on left is standard Ragsdale weight at eight weeks. Has gained 1.1 lbs. a day. Calf on right is average of groups fed Kaff-A with Hidrolex; has gained one-third lb. more per day.

Adv.

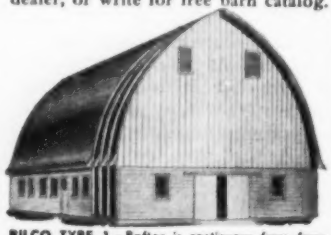
© 1953

†Hidrolex is the registered trademark for hydrolyzed whey manufactured exclusively by Consolidated Products Company.

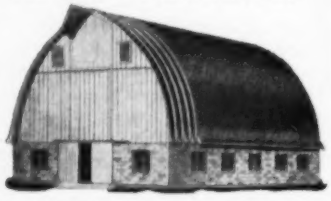
*Fred Bailey is director of Agricultural Services, the nation's largest research and information service. In this capacity, he has reviewed Hidrolex experimental work at leading state and federal experiment stations and has also visited commercial research farms and field tests.

Which barn fits your farm?

These representative Rilco barns are inexpensive to build and maintain—and laminated rafters have enormous strength. Look them over—then see your lumber dealer, or write for free barn catalog.

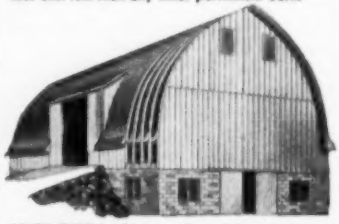


RILCO TYPE 1—Rafter is continuous from foundation to roof ridge, for extra strength and fast erection. Baled hay capacity 3.03 tons per foot of length in 34′ width. Widths from 30′ to 40′.



RILCO TYPE 2—Laminated rafters anchored to joists and plate on masonry wall. Ideal dairy barn, with large, brace-free mow space. Baled hay capacity 3.03 tons per foot of length in 34′ width.

RILCO TYPE 76—Post-free loafing barn. Tied arches spaced 8′ o.c., on poles, posts or masonry sidewalls. Spans 30′, 36′, 40′, 60′. Easily adapted to any use. Cost less than any other permanent barn.



RILCO TYPE 4—Similar to Type 2 but with larger mow capacity—4 tons baled hay per foot of length in 34′ width.

RILCO TYPE 50—One-story post-free barn, easily partitioned for a variety of uses. Spans from 24′ to 60′. Arches can be placed on masonry sidewalls similar to Type 2.

RILCO *Laminated* **PRODUCTS, INC.**

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nearly all of them were.

Opportunities in agricultural occupations. As the requirements for investments in farms and equipment increased, the opportunities of young men to engage in full-time, commercial farming decreased. In some parts of the country, few except the relatives of farm owners could hope to acquire farms, either as owners or renters.

Cooperatives Increase

The cooperative movement and general farmers' organizations. The struggling cooperative movement, which Hoover had sought in 1928 to aid, had become man-size by 1953 with help from the government that Hoover had never contemplated. By 1952, the total number of agricultural cooperatives was 10,035 and the total business done by them had mounted to $8,726,000,000. General farmers' organizations became large and influential.

Farm living conditions. Perhaps the greatest change was in the way farmers lived. Better roads, improved communication, increased use of mechanical devices, available electricity, better schools, and other developments combined to swing the balance in favor of farm living and against city living. Hundreds of thousands of farm homes became as modern and convenient as the better homes in the cities.

Prospects for Agriculture. As the era closed, farmers faced the prospect of feeding an additional 2,500,000 persons per year and a probable population of 190,000,000 by 1975. If present production per acre were continued, 7,500,000 acres of new land would be needed annually, but there was no new land.

Changes in Public Schools

The American public school, always a changing institution, underwent accelerated change from 1928 to 1953. Expenditures for the public schools were nearly doubled. There was about a 50 percent increase in enrollments in public high schools.

The enrollment of adults in the public schools grew to about five million; nearly as many adults as secondary school pupils were enrolled. Evidence of growth and change in public education was to be found in 1953 in almost every community in new school buildings larger than those they had replaced and adapted to new purposes.

Schools Revise Studies

The quarter-century witnessed a rededication of the public schools to the purposes of a free and democratic country. Ideals of equality of educational opportunity came much nearer fulfillment. The secondary schools were redesigned as institutions for all youth of secondary school age. More democratic practices were employed in school administration and in pupil management. Educational opportunities were extended to a larger part of the population.

Curriculum revision received much attention. The idea that all education should be functional outside the schools

VO-AG BUILDINGS . . . many built new ones.

gained much ground. Adaptations in curriculum were made to the new populations in secondary and adult schools. More consideration was given to individual differences.

School Districts Are Bigger

The face of rural education was markedly changed by the enlargement of school districts. In 21 years, from 1932 to 1953, the number of districts was reduced by 55,500, more than 40 percent of the number of districts in 1932.

Farm people in reorganized districts became citizens of districts providing high schools and sometimes junior colleges or adult divisions. No longer was their influence on public education confined to the early grades.

In the latter part of the period, there was an awakening of citizen interest in public education unparalleled in the nation's history. Thousands of citizens' committees interested in the public schools were formed, some of them by citizens and some by school officials. The marked increase in expenditures for the public schools since World War II is one important index of the growth of citizen interest.

Changes in Public School Education in Agriculture

It has been in this environment of accelerated change in agriculture and in the public schools that agricultural education in the public schools has been developing in the past 25 years.

Departments and enrollments. From 1928 to 1953, the number of schools teaching vocational agriculture increased from 4,365 to about 10,000. The total enrollment in high school, young farmer, and adult farmer classes increased from 144,901 in 1928 to 770,403 in 1951.

Adding to the 1951 enrollments the veterans enrolled in classes taught or supervised by teachers of vocational agriculture, the increase in enrollments

For more information from advertisers circle page numbers on ad index, page 64

from 1928 to 1951 was about 850,000 or almost 600 percent. In the same period, the percentage of the total enrollment consisting of young and adult farmers increased from 27 to 58.

Unfortunately, there has been no corresponding increase in the enrollments of students studying agriculture as a part of their general education. We lack even statistics for non-vocational agriculture.

It has developed here and there, notably in California. About 100 teachers of non-vocational agriculture are employed in Los Angeles alone. Generally in the country, there has probably been little change in the number of schools teaching non-vocational agriculture or in the number of students enrolled.

Traditions became entrenched. There are many evidences that public school education in agriculture has, during the past quarter-century, dug itself more deeply into some of the ruts dug prior to that period.

The idea that agriculture can be taught only with federal aid became more firmly established, though most other subjects are taught without federal aid.

Though the Smith-Hughes Act was designed primarily for out-of-school youth and adults and it was only by accident that we became engrossed in teaching high school boys, we were in 1953 still spending most of the funds for vocational agriculture on the teaching of high school boys.

Federal Aid Remains

Though the Act was designed to encourage states and communities to establish their own programs and it was expected that federal aid would be withdrawn, aid is being continued to schools that have been receiving it for 30 years or more. Many of the aided schools continue with their same limited programs.

Schools have come to rely unduly upon federal and state policies for agricultural education and many have no supplementary policies of their own.

Adjustments to change inadequate. There has been too little adjustment to change in agriculture in the past 25 years. The new international relationships of agriculture receive too little consideration.

Education about governmental agricultural policies and the cooperative movement is often sidestepped because of its controversial nature.

Limit to Job Education

The Smith-Hughes Act sought to prepare for "the work of the farm"; much of this work has been transferred off the farm and into processing, marketing, service, and professional occupations. But, commonly, the schools have taken no responsibility for the preparation of

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Order your future needs of lubricating oil, greases, stock spray and insecticides now—and forget about possible price rises in 1954. Sinclair's Farm Sales Future Order is your protection against future price increases for 1954. (Price protection on stock spray and insecticides until May 15, 1954.) So, today, phone your local Sinclair Representative—tell him when and where you want your delivery made—then sit back with another worry off your mind.

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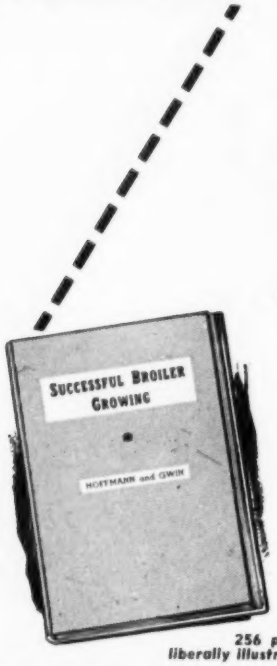

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Here is your chance to get into the big new $500,000,000 broiler industry . . . grow chickens for meat. This new revised edition by Dr. Edmund Hoffman, Associate Professor of Poultry Husbandry, University of Georgia, and Dr. James M. Gwin, Director of Agricultural Extension at University of Maryland, answers your questions about broilers.

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workers for these agricultural but nonfarm occupations.

There has been but slight recognition by the schools of the new army of part-time farmers. In many cases, the schools seem to be proceeding as though every boy born on a farm could become a full-time, commercial farmer, though this possibility has long since ceased to exist. We still have many schools that have not adjusted to the high mechanization of the farms.

Need More Adult Education

In many cases, there has been inadequate adaptation to changes in the public schools. Though the public schools are fast becoming important agencies for adult education, some states and many schools provide no adult education in agriculture except for veterans.

Though agricultural educators pioneered the use of advisory councils, it is

YOUNG AND ADULT FARMERS . . . sometimes neglected.

probable that three-fourths of the agricultural departments of the nation are not sharing in the modern use of citizens' committees. Many supervisors, teacher-trainers, and teachers do not yet see the implications for them of the tendencies toward more democratic education developing in the public schools.

F.F.A. problems. The Future Farmers of America, founded in the first year of the quarter-century, proved to be highly vital and popular. In many states, vocational agriculture came to be known as the FFA. Many chapters of the FFA took on broad programs, requiring much teacher time, so that the percentage of time given to high school boys, already too great in proportion to the time given young and adult farmers, was further increased.

Some Question FFA Foundation

Other difficulties arose with the formation of a national FFA foundation. Some thought that foundation procedures were in opposition to a tenet of the FFA creed, which states: "I believe in less dependence on begging."

Others objected to the use of the FFA as an advertising medium for large corporations and to the preferential treatment given these corporations because of their gifts.

Accomplishments. Though the schools have left undone much in agricultural education that they should have done, they have also accomplished a great deal.

Vocational education in agriculture has become firmly established in a high percentage of the schools that should have it. The states and communities are

FFA FOUNDATION . . . some disagreement.

now contributing more than $3 for each $1 of federal aid received.

Two states (Florida and Utah) have entirely withdrawn federal and state funds for the support of vocational agriculture and many other states have reduced the reimbursements for high school work to 20 percent or less. Adult education in agriculture, a newer venture, still requires liberal federal and state support in most states.

Improve Ag Buildings

Buildings and facilities for vocational agriculture have been vastly improved. Teachers are better educated, both before and after entering teaching. Research in agricultural education is slowly improving; the U.S. Office of Education has listed 1,186 titles of studies in this field.

The organizations of teachers of agriculture are probably the strongest of the organizations of teachers in subject-matter fields. The National Association of Vocational Agriculture Teachers had a membership in 1951-52 of 7,623.

The number of subscribers to the *Agricultural Education Magazine* is approximately equal to the number of teachers of vocational agriculture in the United States. The Future Farmers of America has become one of the strongest boys' organizations in the country with about 350,000 members. The New Farmers of America has an additional 35,000 members.

Agricultural education in the public

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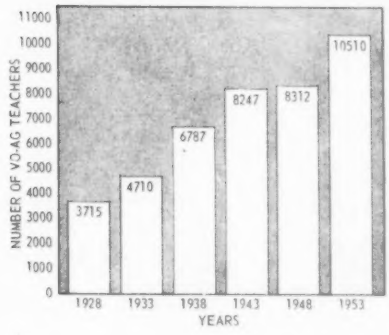
Vo-ag Teacher Scoreboard



schools has won the loyalty of millions of students, former students, parents, and the elements in 10,000 communities which support programs that improve these communities. It has the confidence of all the major farmers' organizations.

Many of the leaders in public education credit it with setting the pace for all education in such respects as functional education, adult education, adaptation to communities, citizen-participation, and teacher education.

During the past 25 years, much has been learned by agricultural educators in the schools about living with other agricultural educators and with professional workers in agriculture. Agricultural extension and public school agriculture have now lived together for 35 years in increasing harmony. There have been more recent adjustments to the newer agricultural agencies.

One of the greatest factors making for cooperation among agencies has been the local use of advisory committees for agricultural education in the schools, for in them are brought together farmers interested in all agencies. Where cooperation has been effected in communities, there has been little cause to worry about cooperation at state and national levels. At these levels, greater understanding and cooperation have developed.

Ideals Are Alike

The greatest factor in the future of agricultural education in the public schools is the future of the public schools. In many ways, the ideals and practices of the public schools have become more like those of agricultural education, so that the public schools provide far better homes for agricultural education than they did in 1928.

Every study of public attitudes toward the public schools, and there have been many of them involving hundreds of thousands of citizens in recent years, shows the public to be solidly behind its schools.

This public loyalty to the public schools is agricultural education's greatest asset.—*End.*

More ears, fewer husks, faster picking

Get what you grow! Go into your corn with a NEW IDEA Picker and fill your wagon box quickly with full-grained ears. Watch the floating points and low-reaching gathering chains skim along the ground, lifting and funneling down corn, tangled and bent stalks into the snapping rolls.

Is your corn damp? Dry? Brittle? Tough? Set your snapping rolls accordingly. A wide range of adjustments is available. With a NEW IDEA you're set to get the most ears snapped and delivered to the husking rolls. Six floating presser wheels and adjustable rolls work together to give you the cleanest husking you've ever seen. Shelling is kept to a minimum. What little shelled corn there is gets caught by the shelled corn saver and put into the wagon box.

You get this sort of performance at the rate of 8 to 12 acres a day — day after day, year after year.

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- ☐ Hydraulic Loaders & attachments
- ☐ I go to school.
- ☐ I farm.....acres.

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50th Anniversary Farm Demonstration Work

Dr. Seaman A. Knapp

December 16, 1833—April 1, 1911

Father of Cooperative Farm and Home Demonstration Work

Famous Knapp Quotations

There is only one effective way to reach and influence the farming classes, and that is by object lessons. . . .

Your value lies not in what you can do, but in what you can get the other people to do. . . .

The power which transformed the humble fishermen of Galilee into mighty apostles of truth is ever present and can be used as effectively today in any good cause as when the Son of God turned his footsteps from Judea's capital and spoke to the way-side children of poverty. . . .

A country home, be it ever so plain, with a Father and Mother of sense and gentle culture, is nature's university, and is more richly endowed for the training of youth than Yale or Harvard. . . .

The home eventually controls the viewpoint of a man; and you may do all that you are a mind to in schools, but unless you reach in and get hold of that home and change its conditions, you are nullifying the uplift of the school. We are reaching for the home. . . .

Mere school teaching merely instructs; it rarely reforms. . . .

No nation can be great without thrift. . . .

Most of the rich men of the United States were born poor. They rose above their fellows, not by superior genius, but by greater thrift. . . .

You can create a love of investigation and give it direction. You can enlarge the knowledge of the people in common things and thus lay the foundation of common sense . . .

A great nation is not the outgrowth of a few men of genius, but the superlative worth of a great common people. . . .

Politeness is the material expression given to human kindness. . . .

From "Select Quotations from Dr. Seaman A. Knapp," compiled and issued by Texas A & M College.

Farm demonstration helps farmers . . .

Learn By Doing
The Method of Extension

By John A. Hannah
President, Michigan State College

● NO METHOD EVER TAUGHT so many has received credit from so few as the farm and home demonstration technique.

A demonstration of scientific agriculture on the land by Dr. Seaman A. Knapp and a Texas farm family a half-century ago signaled the birth of what we now know as the Cooperative Extension program.

Even though the extension program is nearly 40 years old, it is still so new that many persons in our own country do not know of its existence, and many of those who do know it do not understand it. Yet every day, in industry, in our elementary and high schools, and in many walks of life people are "learning by doing"—which is the demonstration method that Doctor Knapp introduced.

This great program of education has grown and thrived because it served the real needs of people. Those needs existed many generations before the Extension Service was established.

Many attempts to satisfy them were made before we finally hit upon the idea of taking scientific knowledge directly to the farmer on his farm and in his home. There it was demonstrated how farm and home problems could be solved by the application of well-tested principles. It sounds simple now, when its usefulness has been proved.

In all this, we must remember that the Cooperative Extension Service would not have succeeded had there not been the experiment stations to develop new knowledge.

We at Michigan State College, where the idea stemmed that produced the great Land-Grant colleges we know today, can look back with pride upon many early exponents of a demonstration idea.

Many Outstanding Leaders

Perry G. Holden, a graduate in 1889 when MSC was Michigan Agricultural College, stands out among other graduates

---

John A. Hannah has been president of Michigan State College since July 1, 1941. He was born in Grand Rapids, Mich., attended the University of Michigan Law School for one year before receiving the Bachelor of Science degree from Michigan State College in 1923. Upon graduation he joined the college staff as an extension specialist in poultry, and subsequently achieved international recognition in that field. Hannah is a nationally recognized educator and school administrator and has achieved an outstanding record during his years as president of Michigan State College. At present he is on a year's leave of absence to serve as Assistant Secretary of Defense in charge of manpower and personnel under U.S. Defense Secretary, Charles E. Wilson.

Here's How to Solve Your WEED CONTROL PROBLEMS

Use GENERAL CHEMICAL Herbicides

WEED CONTROL IN NON-CROP AREAS	GENERAL CHEMICAL PRODUCT	AMOUNT TO USE PER ACRE	TIME OF APPLICATION	REMARKS
SEEDLING GRASSES	Sodium TCA 50% Liquid Concentrate	2 to 2½ gallons	For control of young grass seedlings and to prevent new seedling emergence for a period of time.	
	Sodium TCA 90% Powder	12 to 15 pounds		
GRASS SUPPRESSION	Sodium TCA 50% Liquid Concentrate	2 to 2½ gallons	When applied shortly before heading, this treatment has been effective on northern grasses such as Blue Grass and Quack Grass.	
	Sodium TCA 90% Powder	12 to 15 pounds		
GRASS WEED CONTROL Quack, Bermuda, Johnson, Para, Crab, Foxtail, Japanese Chess	Sodium TCA 50% Liquid Concentrate	8 to 23 gallons	Spring or fall depending upon the grass.	Rates vary with the grass weed to be controlled.
	Sodium TCA 90% Powder	50 to 150 pounds		
BROAD-LEAFED WEED CONTROL	2,4-D Amine Weed Killer	1 to 2 quarts per 100 gallons of water	Applications should be made when plants are growing actively and foliage is fully expanded. Wet foliage thoroughly. Additional applications may be required for deep-rooted persistant perennials such as Bindweed and Canada Thistle.	
	2,4-D Ester Weed Killer			
	2,4-D Low Volatile Ester Weed Killer			
BROAD-LEAFED WEED and GRASS CONTROL in Walks, Driveways and Similar Places	40% Sodium Arsenite Solution	1 to 2 gallons in 10 gallons of water	Apply when weeds are small for best results.	Use lower rate for annual weeds and higher rate for perennial weeds.
		2 to 3 quarts in 5 or more gallons of water per 100 square feet (soil treatment)	Anytime soil is not frozen. Springtime is the best.	Use higher rate on heavy soils or soils not lacking vegetation.
GENERAL WEED CONTROL Grassy Weeds, Broad-Leafed Weeds, Shrubs and Vines	Formula 7BD	10 gallons of Formula 7BD in 150 to 250 gallons of oil	Apply when plants are growing actively and foliage is fully expanded.	Wet entire plant, foliage to root crown. For use in areas where no plant growth of any kind is desired.
WOODY PLANTS and BRUSH	2,4-D Ester Weed Killer	3 to 4 quarts per 100 gallons of water	Use on Willow, Sumac, Elderberry, Wild Grape, and other 2,4-D susceptible plants. Wet all parts of plants thoroughly. Apply when plants are actively growing.	
	2,4-D Low Volatile Ester Weed Killer			
GENERAL BRUSH CONTROL Foliage Treatment	Low Volatile 1½-2½ Brush Killer	1 to 3 gallons	Apply when leaves are fully formed and plants are growing rapidly.	For use on deciduous woody plants and brush where it is desired to kill or repress such growth. These brush killers are not intended for weed control in growing crops, and find widest use in range lands, right-of-ways, fence rows, and waste land areas.
	Low Volatile 2-2 Brush Killer	3 to 4 quarts		
	Low Volatile 2,4,5-T Brush Killer			
Basal and Stump Treatments (Dormant Treatments)	Low Volatile 1½-2½ Brush Killer	1 to 1½ gallons in 5½ gallons of fuel oil	May be applied at any time of the year.	For basal treatment, spray the lower 2 feet of the trunk thoroughly, especially the area at the ground line. Apply stump treatment to freshly-cut surfaces and sides of stumps.
	Low Volatile 2-2 Brush Killer	1 to 1½ gallons in 25 gallons of fuel oil		
	Low Volatile 2,4,5-T Brush Killer	¾ to 1½ gallons in 25 gallons of fuel oil		
BARK TREATMENT (To permit easy removal of bark)	40% Sodium Arsenite Solution	Use undiluted	In late spring or early summer when sap flow is heavy.	Apply to freshly-exposed sapwood in a ring around the trunk.

†Area covered will depend upon the application equipment used and the particular weed or brush situation encountered.

‡Unless otherwise stated use in sufficient water to give adequate coverage. Consult product labels for precautionary information before using products.

The Right Product for Every Weed Problem

For Further Information

and for reprints of this weed control guide in large 22" x 34" wall chart size, consult your nearest General Chemical Field Serviceman or write direct to:

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ALLIED CHEMICAL & DYE CORPORATION
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like Dean Eugene Davenport, Illinois; Dr. Liberty Hyde Bailey, Cornell; Dean Herbert W. Mumford, Illinois; Dean Frederick B. Mumford, Missouri, and Dr. Kenyon L. Butterfield.

In the state of Iowa, Professor Holden was an exponent of farm demonstrations within a few months after Doctor Knapp started the first one in Texas.

County demonstration farms were developed and as early as 1903 Holden had worked out the county, state, and federal partnership idea of financial support. While it differed in some respects, it was fundamentally the same general plan that is now carried out in the Cooperative Extension work.

Communications Help Tell Story

As we approach the Centennial (1955) of this first college to teach agriculture as a science, those of us at Michigan State College reflect in the past and look toward the future—not only of the Land-Grant college and extension programs but of the demonstration method.

Aided by modern mass media of communication, we are better able to show and tell the results of the farm demonstration to the public.

We must remember that the Agricultural Extension Service is the agency of all of the people of the United States—rural and urban residents alike—who support it with their tax dollars. The wonderful thing about it is that all of this great machinery is maintained and operated, not for the sake of a small group or any individual, but for the benefit of all the people of the United States.

It is a classic example of people working together in order to accomplish a good thing which could not be accomplished by all of them working as individuals.

Extension Is Service

Those of you who are in extension work should be proud because it is work in service of others. A family helped to a better life; a home salvaged from a wreck; a boy or girl given an inspiration; more food made available for a hungry world; a new dignity brought to rural living—these are accomplishments which may not loom large on the pages of history, but they should fill every extension worker with a feeling that his work is a job worth doing.—*End.*

★

Wrong Answer . . .

Temperance Lecturer: "Here's an example right from nature. If I put a pail of water and a pail of beer before a donkey, which will he drink?"

Tippler: "The water."

T. L.: "Of course. Now why?"

Tippler: "Because he's an ass."

AGENT COMPLETES 39 YEARS—R. H. McDougall, Pennsylvania, reports that Ross M. Gridley, Pennsylvania county agent, had served 39 years before retiring July 1. He had been serving as county agent in Beaver county. Leon Curran has accepted the position as new county agent in Beaver county.

KANSAS AGENT PRINTS CALENDAR—Kermit Engle, county agent, Ellsworth, Kans., recently sent us a printed calendar of extension activities in his county for the year. The calendar announced the 1953 Farm and Family Living Program, and a complete outline of school and rural educational programs for agriculture, home economics, and 4-H club work. The calendar had been printed in the local paper and then additional copies were printed on light-weight cardboard and distributed throughout the county for local people to have as a guide of extension meetings being conducted throughout the year.

Engle also tells of a silage clinic he has conducted the past two years. This past year included various tests that were conducted on the silage such as moisture, nitrogen, and nitrogen free-extract. He reports that cattle feeders seem to be more feed-value conscious as a result of these tests. Anyone interested in similar projects can get Engle's suggestions on how his program has been operating.

Hugh Hopper, left, retired agricultural worker, visiting a farm where he laid out the first terrace in the county over 35 years ago when he was county agricultural agent. Hopper was the first county agent of Walthall county, Mississippi. With him are the present county agent, Ansel Estess, center, and the present farm owner.

For more information from advertisers circle page numbers on ad index, page 64

PROMOTIONS FOR TWO COUNTY AGENTS—Two North Carolina county agents recently have accepted positions as district agents in the state of North Carolina. They are Howard Singletary, county agent, Stanley, who will be in charge of the southwest district, and M. E. Hollowell, county agent, Nash, who will be in charge of the northwest district. Each will supervise 17 counties.

C. D. Christian, R. E. Hunter, J. D. Hethcoat, Troy Jennings, and John Cavender, Arkansas county agents, serving chicken barbecue to 145 extension workers attending the regional summer school at the University of Arkansas.

"MRS. NICK" DIES—We were saddened to receive word from H. M. Nichols, president of the NACAA in 1947, that Mrs. Nichols died July 7.

She was known as Olive, Olive-Jean, or Mrs. Nick to so many people in practically all the states that take part in NACAA activities.

Everyone will remember that Nichols moved to Panhandle, Tex., to find a climate that might be helpful to Mrs. Nichols in her trouble with arthritis. She was winning this battle. She had gained from under 80 to over 120 pounds.

However, on July 7, she entered the Highland General Hospital for an operation which had nothing at all to do with her arthritis. She developed what the medical profession calls a laryngeal spasm and they were unable to get air to her in time.

Our sincere sympathy goes to Nick and his family at this time.—*End.*

Hand Pruner Booklet

Two booklets, "How to Use and Sharpen Pruners," and "How to Use and Sharpen Metal Cutters" are available to agricultural leaders.

As the titles indicate, they give information on sharpening these tools that are commonly found in farm shops and in the individuals tool box.

Agricultural leaders desiring copies of these two booklets may write to the H. K. Porter Co., Inc., Sommerville 43, Mass.

Can You Solve This Problem?

If you're a county agent, Vo-Ag teacher, or extension worker, it's *your job* to solve it. For this is a picture of the current "cost-price" squeeze that threatens today's farmer with catastrophe and he'll be looking to *you* for an answer.

His costs are soaring. For example, in 1945 he could raise an acre of corn for an average cost of $28.76. Today, the average cost for that same acre of corn is $48.54. And, as with everyone, his living expenses are steadily climbing.

But his income is falling. In 1951 he received, on an average, $1.70 for a bushel of corn. Today he gets only $1.56. This same general picture is true of his other crops.

Thus he's caught coming and going. Each year the "cost-price" squeeze eats deeper into his profits. And authorities agree the worst may be yet to come.

The only way out for him is to *get more bushels of corn* from each acre. To survive, he must get the best fertilizer his money can buy. Many farmers testify that a carefully chosen grade of mixed fertilizer, plus the vital push of extra nitrogen in the form of Spencer's "Mr. N" Ammonium Nitrate Fertilizer, will often double their per-acre yield of corn. There's no better answer to the "cost-price" squeeze.

To help him and you, why not ask for a FREE reprint of our poster, "Beat the Cost-Price Squeeze" . . . ready to tack on your bulletin board.

SPENCER CHEMICAL CO.
Executive and Sales Offices
Dwight Building, Kansas City, Mo.

Covering a 25-year span are these . . .

Echoes from Our Readers

● DURING THE FIRST year of publication, 1928, countless readers wrote to Editor Arch Merrifield commenting on his new magazine, *Better Farm Equipment and Methods.*

Today, of course, that magazine, now known to you as *Better Farming Methods,* has completed 25 years of publication.

From the number of letters published in 1928, we selected a few from leaders who we knew were still active in the agricultural leader field. We wrote to them, quoting their first letter written in 1928, and asking for comments today.

We think you will find these letters interesting. These letters show that a number of workers in this field remain there for practically a lifetime. They have found not only economic justification for continuing, but have achieved a personal satisfaction from their efforts to serve their farm people.

Many of them were vo-ag teachers in 1928 and have now risen in the ranks to become state supervisors and directors.

From the Rocky Coast of Maine

1928

"Believe it will prove valuable to the vocational agricultural teachers and would appreciate a copy regularly."—*John A. Snell, vo-ag instructor, Hampden Academy, Hampden, Me.*

1953

"I was interested to receive your communication in which you request verification that I am the same person who wrote the comments published in *Better Farming Methods* 25 years ago. I am very pleased to confess that I was responsible for that statement.

"It is very pleasing to report at this time that *Better Farming Methods* has more than fulfilled its promise as indicated in 1928. Over the past 25 years it has been valued highly and has been read with a great deal of interest by Maine teachers of agriculture. I am sure that it has made very valuable contribution to our program."—*John A. Snell, director vocational agriculture, Maine.*

. . . to the shores of Delaware

1928

"Allow me to congratulate you on *Better Farm Equipment and Methods.* It is fine for class work. The boys have started a club project of each corresponding with some other agricultural department in the United States. Keep up the good work."—*W. Lyle Mowlds, vo-ag instructor, Bridgeville, Del.*

1953

"Was I surprised to see what I wrote you in late 1928. To tell the truth I did more of that type of thing then than I do today.

"Well, it has been good to grow-up together in this field of agriculture work and I again want to say that your magazine *Better Farming Methods* has always been a big help to the agriculture teachers and supervisors; and I hope it will always be that way. May we both have many more years together. Good luck!"—*W. Lyle Mowlds, state supervisor agricultural education, Delaware.*

. . . down to North Carolina

1928

"This is to express my appreciation of your magazine. It is growing better and better with each issue."—*D. S. Weaver, agricultural engineer, N. C. State College of Agriculture.*

1953

"While you probably want a little different expression than the one made in 1928, I don't know of any better one than to simply repeat exactly what I said then and date it 1953.

"I have always found your efforts to be most instructive and helpful. I like the style, and I believe that our country agents get a great deal from your publication.

"May your next 25 years be as fruitful as the past!"—*David S. Weaver, director, North Carolina.*

. . . and on to Pennsylvania

1928

"I have looked over your publication and read it with a great deal of interest. I believe it will be a distinct help to our teachers of vocational agriculture."—*H. C. Fetterolf, assistant director, vocational education, Pennsylvania.*

1953

"Without a doubt, I must plead guilty to writing the letter which you quote in your letter. I could have written this letter in 1928 or before that date, as I am completing 39 years in vocational agriculture on June 1 of this year. I have been chief of agricultural education in Pennsylvania for 37 years.

"In addition to quoting my letter, you may say that I find your magazine in all of our departments of vocational agriculture throughout the state. From the favorable comments of the teachers of agriculture, I feel that you are rendering a worthwhile service to our teachers in the articles on vocational agriculture which you publish."—*H. C. Fetterolf, chief, agricultural education, Pennsylvania.*

. . . then across broad Ohio

1928

"I find it one of the most interesting publications that comes to my desk. It has a very definite service for its readers, is well conceived and executed."—*J. H. Lintner, vo-ag instructor, Fredericktown, O.*

1953

"I am happy to have you recall to me the time of dictating a letter to you back in 1928 concerning the excellence of your publication.

"I am even happier, however, to state that my opinion has not changed in the past 25 years and I feel that you have made very significant progress during that time.

"It is my observation that colleagues in this office read *Better Farming Methods* almost within an hour after it is received.

"While all of the contents is of interest I find the Washington News in the front of the magazine and your editorial in the back are particularly interesting and informative."—*J. H. Lintner, district supervisor for veterans training, Ohio.*

. . . to the lake country, Wisconsin

1928

"The first number of *Better Farm Equipment and Methods* is a credit to you and your organization. Incidentally, we had an inquiry from a teacher before we saw a copy of the first issue."—*F. A. Wirt, J. I. Case Threshing Machine Co.*

1953

"Your letter brings back many memories.

"I have no reason to believe that I did not write the letter which you quote. This appeared in the September, 1928, issue of *Better Farm Equipment and Methods.*

"You are to be congratulated on your 25 years in publishing *Better Farming Methods.* This company has taken space in your publication every year, beginning with the September, 1928, issue. The results from calling the attention of your readers to our educational motion pictures, slide-films, booklets and wall hangers have been very satisfactory. This we attribute to the excellent readership enjoyed by your publication, as a result of the great service rendered your readers through the educational contents of your splendid magazine!"—*Fred A. Wirt, advertising manager, J. I. Case Co., Wisconsin.*

. . . through Iowa, the corn state

1928

"I surely appreciate your magazine. It fills a long felt need and presents much material which is highly useful in class work."—*Hampton T. Hall, vo-ag instructor, Charles City, Ia.*

1953

"I must admit to writing the notation in 1928 which appeared in *Better Farm Equipment and Methods.* At that time, the vocational agriculture program was 11 years of age, struggling to determine objectives,

Let's look ahead together!

HENRY FORD was born on a farm. He was raised on a farm. At heart, he remained a farmer all his life.

He designed the first cars that were practical for country roads and farm use. He developed trucks that brought farmers and their markets closer together in terms both of time and cost.

He was working on a farm tractor even before his automobile business was firmly established. It was his vision and oft-stated purpose to do all he could to lift the burden of farm labor off the backs of men and place it on machines.

How well he succeeded is evidenced by the more than two million Ford-built tractors which have contributed so notably to the easing and speeding up of farm work — and by the revolutionary advancements in tractor design and manufacturing methods for which he was responsible.

Thus a deep and sincere interest in farming is traditional with the Ford Motor Company.

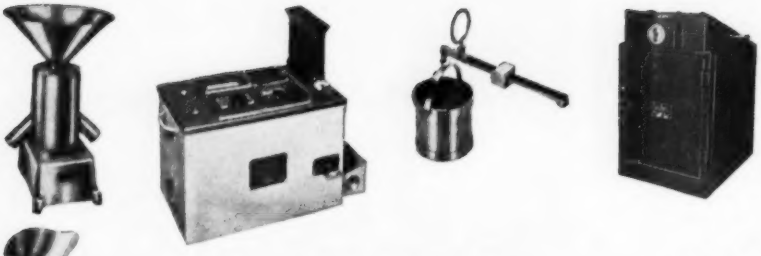
And, today, we can see still greater opportunities for service to farming, particularly in the development of more and still better ways of using efficient, economical tractor power.

Through our new Ford Tractor Division, we are now entering into the important tractor and implement business on a broader scale than ever before.

Let's look ahead together to the day when the full possibilities of mechanized farming will be realized; when machines will handle all the heavy drudgery on American farms, and do it better, faster and more economically.

FORD MOTOR COMPANY

"HE WHO SERVES AGRICULTURE SERVES ALL MANKIND"



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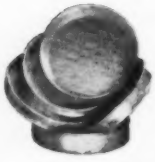

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TEACHING REMINDERS

SEPTEMBER

School bells are ringing again. As you start another "big year", it is well to note the accomplishments of agriculture education—50 years of service by Extension and the F.F.A. has been organized 25 years. Discuss the value of early plowing for wheat and the importance of complying with "Fly Free Date." Crops can pay for storage buildings when the buildings permit "conditioning" and holding for higher prices. High moisture is the most frequent cause of soybean deterioration. Damp beans make ideal conditions for mold growth and should be below 14% moisture when harvested. It is unsafe to store beans with more than 11% moisture for long periods. Review ways to reduce losses in stored grain (June Reminder).

MORE PROFITS under AVERAGE FARM CONDITIONS with TRULY DUAL PURPOSE MILKING SHORTHORNS

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Under average farming conditions, Milking Shorthorns will give more profit because they convert home-grown feeds and roughage into meat, milk and butterfat most economically. A Milking Shorthorn holds highest butterfat record in world — also highest records on twice-a-day milking! Milking Shorthorns are BIG . . . have capacious deep body and mammary development of dairy cattle. Their TWO-WAY bargaining value plus greater saleability of calves means greater farm security under uncertain world conditions. Get FREE facts or subscribe to Milking Shorthorn Journal. 6 months, $1.00; $2.00 per yr.; 3 yrs., $5.00.

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The Bostrom is used and endorsed by Schools, Extension Service & Individual Landowners everywhere.

Anyone can operate a BOSTROM Level by following the simple direction booklet included with each Instrument. We manufacture 3 models; Farm Level, Contractors Level, Convertible Level. All BOSTROM Levels are sold on the guarantee of satisfaction or money back. WRITE TODAY for literature, prices and name of our distributor near you.

Bostrom-Brady Manufacturing Co.
520 Stonewall St., S. W. ATLANTA, GA.

evalue techniques and find its place in the public school. Teachers of vocational agriculture needed encouragement and welcomed a means to secure information and exchange ideas.

"*Better Farming Methods* magazine in its name and in the information which it contained seemed to catch the spirit of the vocational agriculture program. It was then and continues to be "tailor made" for the instructor in keeping abreast of developments in agriculture. The vocational agriculture program, and through it, countless numbers of farm boys, farmers and communities have directly and indirectly benefited from your splendid publication.

"Congratulations upon 25 years of service to agriculture in this country, and may you continue to serve for years."—*H. T. Hall, supervisor, agricultural education, Iowa.*

. . . to the prairies of Kansas

1928

"Am glad to see a paper of this kind available for Smith-Hughes schools. Would appreciate being placed on your mailing list." —*A. P. Davidson, professor, vocational education, Kansas State Agricultural College.*

1953

"It has been my privilege and pleasure to receive and use your magazine during the past 25 years. *Better Farming Methods* through its leadership articles, editorial coverage, and source listings, has been most helpful to the workers in the field of vocational agriculture."—*A. P. Davidson, head teacher trainer, agricultural education, Kansas State College.*

. . . pausing in sunny New Mexico

1928

"Your new magazine is a fine thing and can be of great service to vocational agriculture. The exchange of ideas is good, as well as the articles written by men who are experts in their line."—*J. L. Perrin, vo-ag instructor, Salisbury, Mo.*

1953

"I am guilty of writing the letter from Salisbury, Mo., in 1928.

"I wish to state that I have been impressed with the progress *Better Farming Methods* has made since its inception. The service which your magazine renders leaders in agricultural education is unique in that it serves a variety of interests in the field of agriculture but is sufficiently specific to be practical for specialists in several fields of agriculture.

"Congratulations on your silver anniversary. I trust that *Better Farming Methods* will continue to serve agricultural workers for many years to come."—*J. L. Perrin, assistant state supervisor, agricultural education, New Mexico.*

. . . before the final stop, California

1928

"I find your magazine a very helpful source of practical information and should

For more information from advertisers circle page numbers on ad index, page 64

like copies for my individual use and for use in my classes. In a department of four instructors and over 100 students, the single copy does not meet all the demands."—*J. E. Walker, vo-ag instructor, Modesto, Calif.*

1953

"I was quite surprised to receive your letter containing a quotation from a letter I wrote to your magazine from Modesto, Calif., in 1928.

"From that date until now I have been a constant reader of *Better Farming Methods* and have found it most helpful in my work, both as a teacher and superivsor of vocational agriculture in the secondary schools of California."—*J. Everett Walker, regional supervisor, agricultural education, California.*

☆

Knapp Cup To USDA

On May 8, Virginia A. Knapp, granddaughter of Dr. Seaman A. Knapp, presented to the U. S. Department of Agriculture the silver cup that was given 43 years ago to Dr. Knapp by his coworkers in appreciation of his leadership.

Accepting the cup on behalf of the USDA was Secretary of Agriculture, Ezra T. Benson.

The silver cup, shown in the picture, was made by Tiffany of New York from

At the left is Miss Virginia A. Knapp, granddaughter of Dr. Seaman A. Knapp, presenting the silver cup to Ezra T. Benson, Secretary of Agriculture. Benson accepted it on behalf of the USDA.

a special design originated by the coworkers who presented it to Knapp. Around the top, the cup is decorated with rice to commemorate Knapp's success in building the rice industry of the South.

Around the base, it is decorated with corn and cotton, the two staple crops of the South, to commemorate the rural improvement of agriculture brought about through the Farmers' Cooperative Demonstration Work.

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HYBRID
This NEW TRADEMARK now identifies our complete line of Great Old Favorites and Fine New Funk's G-Hybrids

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NEW 1954 Corn Data Notebooks and Illustrated Corn Guides are now ready for distribution.

WRITE US YOUR NEEDS

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MINERAL DEFICIENT
BARN DIET
CAN ROB YOU OF
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✻"Livestock prices suggest utmost feeding economies. In the barn, animals should receive best quality hay and silage to keep down the need for grain. Beef breeding cows can often get by on hay and silage alone, if hay is high in legume."

But remember—any feed supply can be deficient in salt and trace minerals essential to health, gain and milk production.

So guard against this by keeping STERLING *Trace-Mineral* BLUSALT easily available.

Blusalt provides salt for the digestion of protein, carbohydrates and fats plus: **Cobalt**—essential for Vitamin B_{12}—guards against loss of appetite, permits maximum body gains and helps maintain normal level of hemoglobin in the blood. **Manganese**—for successful growth, reproduction, lactation and bone development. **Iodine**—to help prevent simple goiter. **Iron**—essential as part of the hemoglobin to every organ and tissue of the body. **Copper**—necessary with iron for hemoglobin formation. **Zinc**—growth producing and a part of enzymes.

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100-lb. bags
50-lb. blocks
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Your Ag Leaders Predict . . .

The Next 25 Years

1953 — Vocational Agriculture — 1978

By Byron J. McMahon
Chief, Agricultural Education
California State Polytechnic College

● VOCATIONAL AGRICULTURE in the next quarter century?

No prediction can be made for the nation as a whole, for we are witnessing great shifts in population and great changes in the occupation of farming.

My own state of California must absorb more new families each day than were dreamed of at the frantic height of the Gold Rush—a new "city" of 7,000 must be created each week. Under such an impact, our large farms must produce more food by better farming—our small farms are being subdivided out of existence.

Classes Will Expand

In the next 25 years, we plan for a stable "core" of 12,000 to 14,000 students in full-time vocational agriculture classes, plus a growing number of semi-vocational students or those preparing for related work.

Much of the handling of farm commodities, once done on the farm, is now a specialized off-farm occupation. Much of the service once performed by farmers for themselves, is now done by men with related training; and nowhere has this been developed to a greater degree than in California.

School Farms to Expand

I foresee in each high school serving rural areas, both vocational and non-vocational courses, an expansion of school farms to provide practical self-owned projects and work experience for boys whose goal is productive agriculture but whose homes are in suburban or even city areas.

There must be greater liaison with colleges offering technical and professional work, quite likely a re-evaluation of our concept of the totally "terminal" nature of vocational agriculture.

I see a greater challenge in the next quarter century to meet these changes.—*End*

1953 — Soil Conservation — 1978

By R. H. Musser
Regional Director
Soil Conservation Service

● BENEFITTING BY OUR experiences in soil and water conservation during the past two decades, I have every reason to believe we will have practically completed the basic job within the next 25 years.

The American public has realized that conservation of our soil and water resources, while making full and proper use of them, is basic not only to maintaining a high standard of living but also to our very existence.

About 20 percent of the job is well done now. Another 20 percent is partly done. The last 60 percent will be the hardest to accomplish. Even so, the stage is set to pyramid past accomplishments in the next 25 years.

First, the widespread interest by farmers, businessmen, industry, schools, radio, press, and others, each one wanting to do his part, is important now and will be more important during the next 25 years.

Second, there are nearly 2,500 soil conservation districts in the country. Soil conservation districts exemplify farmer leadership and farmer management of the soil conservation program, with grassroots direction and authority.

The soil conservation district movement has come of age and speaks for itself. Districts will play an increasingly important role in future progress. Districts are people and their objectives are sound.

Third, through research and experience, much advancement will be made in technology and its application. Not only must we maintain our soil productivity, but we must increase production if we are to keep pace with the ever-increasing demands of our population.

These demands will be met by efficient

For more information from advertisers circle page numbers on ad index

Here's the fertilizer you always wanted!

FARMERS have been asking for a new and better fertilizer designed for today's crops and today's farming methods. ARCADIAN® 12-12-12 is the answer! Produced by an entirely new process of chemical blending and granulation, this modern fertilizer offers you many superlative advantages:

Every pellet is a complete fertilizer containing 12% nitrogen, 12% phosphoric acid and 12% potash, the balanced ratio recommended by leading experiment stations.

It contains no filler. Nothing but high-quality plant food materials are put into ARCADIAN 12-12-12. It contains calcium, sulphur and other minor elements.

It's rich in nitrogen, the growth element! ARCADIAN 12-12-12 contains four times as much nitrogen as 3-12-12. About half the nitrogen is quick-acting nitrate and the remainder is long-lasting ammonia, for graduated feeding of crops.

Non-caking and non-dusting. ARCADIAN 12-12-12 stays in excellent condition for long periods in dry storage. Uniformly-sized granules are free-flowing in all types of fertilizer distributors — grain drills, corn planters and airplanes.

ARCADIAN 12-12-12 is an excellent fertilizer for corn, small grains, pastures, fruit, truck and other crops. Ask your County Agent! Use it this fall!

Packed in easy-to-lift, 80-pound bags, ARCADIAN 12-12-12 is the modern fertilizer you asked for! See your fertilizer dealer! Place your order early!

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NEW WEED

ROTO-GRIPS

ALL-SEASON, ALL-JOB FARM TRACTOR CHAINS

● Swivel-ended, case-hardened cross chains are teamed up with massive non-kinking side chains to produce the tractor tire chains farmers demanded—the new all-purpose WEED ROTO-GRIP. Here are a few reasons why ROTO-GRIPS get farmers into the fields earlier in the spring—permit them to work later in the fall:

Constant traction on mud, snow, ice or frozen ground—cross chains roll to crown of tread, stand out sharply, add traction where tire grips best.

One chain for every job—plowing under slippery cover crops, moving equipment from muddy fields, clearing snow from lanes and driveways, etc.

No balling or tightening on the tire—self-cleaning.

Easy to put on—flexible, easy to handle—no adjusters or tighteners needed.

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use of our facilities and full cooperation of responsible agencies, organizations, and individuals having a major responsibility in soil and water conservation.

Recognize Land Value

Fourth, there will be even greater recognition of land capabilities as a sound and scientific basis for determining not only land values but also establishing a more equitable tax base.

Fifth, people are working together in groups; neighbors, communities, and watersheds where common interests and common problems are recognized. Much more can and will be done by farmers

FLOODS . . . conservation will control them

themselves during the next 25 years when given the necessary research, education, technical, and credit assistance which they themselves cannot provide.

Sixth, soil conservation, when properly and fully applied by the farmers, pays handsome returns. This forecasts greater agricultural prosperity for the future.

Soil conservation is basic as a first and important step in flood damage prevention. It keeps the soil on the farm where it belongs. It keeps necessary water on the farm and provides for orderly disposal of the surplus water.

Water Management Important

Seventh, I believe the part soil conservation plays in water management and reduction of flood damages will be universally accepted during the next 25 years. There will be a greater understanding of mutual watershed problems and watershed controls and management will become as important, whether you are buying a farm, locating a new factory or laying out a sub-division, as water rights are today in the west.

Eighth, we will be taking a better long-time look at how to meet our conservation needs and develop a long-time, effective plan for meeting them.

Conservation to Advance

Ninth, with the background of understanding, experience, and accomplishment of the past 20 years as a foundation, I predict at least a 300 percent advancement in the application of soil and water conservation during the next 25 years.

We need make no apology for the accomplishments of the past 20 years. We need to move much faster, that is true. But, we are well tooled to do just that.

That's how my conservation eyes see the next 25 years.—*End*

1953 — 4-H Club Work — 1978

By A. G. Kettunen
State 4-H Club Leader
Michigan

● ON THE BASIS of the growth and development of the 4-H club program since its establishment in 1914 with the passage of the Smith-Lever Act, one can predict a bright future for the work of the 4-H clubs in the 25 years which lie ahead.

More attention will be given by the Extension Service for the training of personnel whose responsibility it is to work with youth throughout the nation. This in itself will mean much to the development and effectiveness of the 4-H program in the next 25 years.

There is an increasing demand on the part of people living in the urban areas of the country to make 4-H applicable to the needs of urban youth. One can see a great development in this area.

The field of conservation, both from the standpoint of the conservation of our natural and human resources offers an unlimited field for the expansion of 4-H activities. Much will be done in this area in the next 25 years.

The training and recognition of volunteer local 4-H leaders who represent, in my thinking, the most important part of the 4-H club program will become increasingly important. Without the local volunteer leadership, 4-H clubs cannot exist and hence they cannot expand without additional leadership.

There will be added support to the 4-H club program by business organizations and interested individuals through established organizations like the National Committee on Boys and Girls Club

For more information from advertisers circle page numbers on ad index, page 64

Work, the National 4-H Club Foundation, and the many foundations and organizations which are being developed by states in behalf of the state 4-H club program within their states.

There will be a need for extension to make many adjustments and changes in the present 4-H club program because of the drastic changes taking place in the homes and the farms of the nation. We are in a mechanized era and will be more so in the next 25 years; 4-H needs to keep pace with this development in all its aspects.

In the next 25 years there will be a tremendous advance in the establishment of 4-H club work in most countries of the world. The seed that is now being sown throughout these nations will mean that in the next 25 years 4-H will be an International program on a very effective basis.

There is every indication of that because of the interest that is exhibited by people who are visiting our countries.

The 4-H horizons are ahead of us. Much can be done in the next 25 years to expand and make more effective the work of the 4-H clubs nationally and internationally. For one who has been active in the program for the past 36 years, the future looks very bright indeed.—*End*

1953 — Future Farmers of America — 1978

By W. T. Spanton
National FFA Adviser

● NOT MANY OF US who were on hand in 1928 when the national organization of Future Farmers of America was formed would have dared to predict the brilliant future that was in store for the organization, or the great advances that would be made by 1953.

During this anniversary year we can look back with justifiable pride for the past achievements, but, just for fun, let's take a look at what the next 25 years may have in prospect.

FFA GOAL . . . better American farmers

Must Forge Ahead

One thing is certain: FFA and vocational agriculture must forge ahead. There is no resting place. Yesterday's goal, accomplished, must be today's starting point. Any organization that seeks to rest on the laurels of its past accomplishments soon finds itself in the position of the farmer who does a fine job of spring plowing and planting, then puts up his tools. The weeds soon take over the corn.

The program of vocational education in agriculture was born of a need to provide practical training in farming to boys who would be the farmers of the future. Success of vocational agriculture in the last 35 years has come about through the fulfillment of that need.

Is it not logical, then, to look at the needs of the future in setting our course for the things that must be accomplished during the next 25 years?

Still Need Farm Training

The need for training farm boys in agriculture is still here. It is a more pressing need today than it was in 1917 when the Smith-Hughes Act was passed. All of the great advances in farming practices that have been put into use in recent years demand more skill and managerial ability in the farmer. New practices are being developed and put into use so fast that today's most modern farmer, unless he changes with the times, will be hopelessly out of date in 10 years.

We hear a lot these days about the "Fifth Plate," and the fact that a steadily decreasing number of farmers must gear their production to meet the needs of a steadily increasing population. We are told that farmers will meet the new production demands by increased use of fertilizers, more efficient crops and livestock, greater mechanization, use of supplemental irrigation, and so on.

Farmers Need Education

Too little has been said about the educational needs of those farmers. We know that it takes about 130,000 new farmers every year just to replace those who retire, or otherwise leave the farm.

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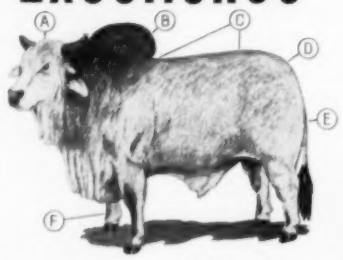

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B Hump — Ample in size, directly on top of shoulders, moderate in thickness.
C Back and Loin — Broad and level from hump to hooks.
D Rump — Long, wide, nearly level.
E Thigh — Broad, thick, full and deep.
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out for them, we know that they will need to be highly trained farmers, intelligent, with a sound background of practical experience. Moreover, they will need to have begun their preparation for farming at an early age, including the building of farming programs that lead toward successful establishment.

The program of vocational education in agriculture is the only program that has ever been developed to offer practical, systematic agricultural instruction to farm boys on a mass basis, and at the same time offer opportunities and encouragement for the boys to build toward establishment in farming.

VO-AG TEACHER . . . responsibilities will increase

Should we not, then, expect that in the normal course of American development the vocational agriculture program will continue to expand until it supplies the need for new farmers?

Departments Will Increase

I believe that within the next 25 years departments of vocational agriculture will be established in 15,000 rural communities, and that the annual enrollment of all-day students in those schools may exceed 600,000.

Since vocational agriculture and the Future Farmers of America organization are so interrelated, I believe that membership in the FFA will continue to increase until it passes the half-million mark.

FFA has been in its formative years, even to this date. The future will see better use of the FFA in helping farm boys develop their talents in leadership, awakening their senses of civic responsibility, and stimulating them to work and study harder toward success in their chosen occupation of farming.

FFA to Get More Notice

Along with a more effective program will come greater recognition. The FFA has enjoyed ever-increasing recognition from the press and radio during recent years. Business and industrial firms, from the local grocery stores to giant corporations, have begun to take interest in the work that FFA is doing and to lend their support to the program.

Much more cooperation of this type may be expected in the future. State and national leaders, many of whom may come from the ranks of FFA, will show more and more interest in Future Farmers as the organization develops.

There will be problems to face, of course. The fact that I am confident of the future does not in any way allay my belief that all of us must continue to work to bring about that success.

We have the program; we have the leadership and are developing more; and there is need for the things that vocational agriculture and FFA can offer.

Leaders to Write Future

I am not enough of a fatalist to believe that the future is written. We who are the leaders and members of the FFA today, and those who will come after us, must write it.

The greatest inspiration that has come to me in my many years of work with the FFA has been my association with the organization's young leaders. Each year as we get to know a group of national FFA officers we marvel at their competence and wonder where we'll ever find more like them.

The young men developing today in the vocational agriculture and FFA program are the farmers, the vocational agriculture teachers, and the farm organization leaders of tomorrow.

They are the basis for my faith in the future, not only of FFA, but of all America.—*End*

1953 — County Extension Service — 1978

By Ed Bay
Illinois Farm Adviser

● IT IS INDEED a privilege and a special honor to try to present some thoughts on behalf of county agricultural agents regarding what might be foreseen in our field of endeavor during the next quarter century.

However, I do not feel that it is possible for anyone to see into the future and accurately predict future developments in extension service programs.

Before attempting to look ahead 25 years, I think we might look back 50 years to 1903 when Dr. Seaman A

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Knapp established educational demonstrations on farms near Terrell, Tex. He worked cooperatively with farmers and their organizations, with representatives of the Land-Grant College, and with businessmen.

Advice for Teachers

In one of his talks he said: "Our greatest need being a wide knowledge of common things, the teacher who really enters into country life and seizes its opportunities for developing the resources of the country, for increasing the harvests, improving the landscapes, brightening the homes, and flooding the

FARMERS . . . they'll be better educated

people with knowledge of helpful things, will never want for friends nor for places to teach. How joyfully will such a teacher be welcomed!"

These words of Dr. Knapp are just as true now as when originally spoken. They can be particularly helpful to county agents in getting the proper perspective for the future.

Farming Has Changed

We have come a long way since 1903. Farming methods have changed a great deal, particularly because research has brought tremendous changes in the basic knowledge which can be directly applied to farming.

County agents, serving as agricultural interpreters, have formed the connecting link between research and experimental data on the one hand, and the farmer and his family on the other. During recent years, other agencies, organizations, and individuals have come into the field of agricultural education.

County agents, in the main, have worked hard trying to coordinate the various programs of the other agencies and organizations to serve the best interest of the farmer and his family, as well as of the land itself, and of the agricultural industry as a whole.

But *people* have not changed basically, nor has there been any significant change in the need for factual information pertaining to many types of agricultural production, processing, market-

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ing, and utilization. There is still great need for community development, the training of our youth for citizenship, and the ever present need for leadership training.

In the paragraphs which follow, I will attempt to outline what I believe may be some of the outstanding possibilities in the future development of county agent work.

1. Personnel Will Grow

There are encouraging signs that extension work in general, and the work of county agents and farm advisers in particular, has the respect and support of both farm people and the general public.

New demands for broader extension programs have developed in practically all counties and states. To fulfill these demands and opportunities, increased finances and additional trained personnel will be needed. County agents should be preparing to meet their responsibilities of administering expanded programs.

2. Re-examine Extension Program

County agents should, in the very near future, with the help of local farm people:

(a) Re-examine the county extension program of work to be sure that it is properly filling the needs of both the agricultural interests of the county, and of the farm people of the county;

FARM MEETINGS . . . need strengthening

(b) be sure that the extension program is properly coordinated with the over-all agricultural program of the county; and

(c) be sure that proper publicity and information is provided regarding the extension program of work, its availability to all, and the close connection with the Land-Grant College, as well as relationships with other agencies and organizations.

3. Education Will Be Needed

Farmers of the next quarter century will, on the average, be far better educated and informed on technical agricultural matters than were their fathers and grandfathers. If you accept as a fact this statement, then it follows that county agents must of necessity be better educated and better equipped to meet the increased responsibilities of the job.

Individual county agents who do not continue to take advantage of every opportunity for professional and self improvement, may live to regret it.

New agents must come better prepared for the job than many of the past and present generation.

State extension administrators will of course keep themselves, and their staffs, not only abreast of the times, but will provide both adequate training programs for those already in the service, and for those who expect to take up extension work as a vocation.

COUNTRY STORE . . . marketing was simple

4. Extension Has Opportunities

Great opportunities have been given extension workers in the fields of education and information. In the span of a few years, 4-H club work has become recognized as the outstanding organized program of out-of-school youth training for good citizenship in the world.

County agents and others responsible for the direction and administration of youth programs on the local and state level must work hard at the job of "Making the Best Better." They must maintain a coordinated program, with 4-H club and older youth programs as a part of the over-all extension program, working with the farm family as a unit.

5. Develop Spiritual Leadership

Many county agents and farm advisers have been great spiritual and inspirational leaders in their communities, as well as being leaders in the field of adult and youth education.

County agents of the future, like those of the past, will fall far short of their opportunities if they fail to provide soul-satisfying inspiration, as well as mind-satisfying educational information.

6. Disseminate Policy Information

Agricultural leaders have recognized for some time that extension has both responsibilities and opportunities in the field of public policy information. This

For more information from advertisers circle page numbers on ad index, page 64

is particularly true from the standpoint of making available basic information so that farm people will have a better understanding of the economic principles concerned with many public policy matters, including agricultural programs.

Many county agents have already performed valuable service in this field, but much more needs to be done, and much needs to be done with groups of citizens other than farmers, too.

7. Efficiency Must Increase

It is probably safe to prophesy that increased efficiency will be necessary if most farmers are to survive the next decade or so. This will not only be a challenge to the initiative and enterprise of farmers, but will mean that county agents must of necessity become even more proficient in encouraging and teaching sound farm management principles.

8. Strengthen Our Communications

In many cases, we will need to strengthen our lines of communication with the people of our communities, particularly with farm people.

A number of things might be mentioned in this connection, including the use of many and varied forms of visual education not excepting the old but tried and true "demonstration" method. The value of using several different methods of communication has been well established.

Undoubtedly, we will have to work harder at the job of providing both constructive and interesting county and community meetings. In addition, we must sell the adult leadership in our counties on the importance of community organization, partly as a vehicle of individual expression, and partly to create opportunities for the development of leadership, both of adults and of youth.

Keep These Points in Mind

In conclusion, we should keep in mind that as we develop extension programs, we should be definitely concerned to see that:

(1) We have the active cooperation and help of the best rural leadership in the county;

(2) that programs are largely developed by farm people to meet the needs and interests of the people of the particular area involved;

(3) that we carry on an effective informational and educational program, based on the program of work as developed, both on a long-time and short-time basis; and

(4) that we aid in the development of rural citizenship, and leadership, that will be of increasing value to the various communities, counties, states, and to our nation for the years ahead.—*End*

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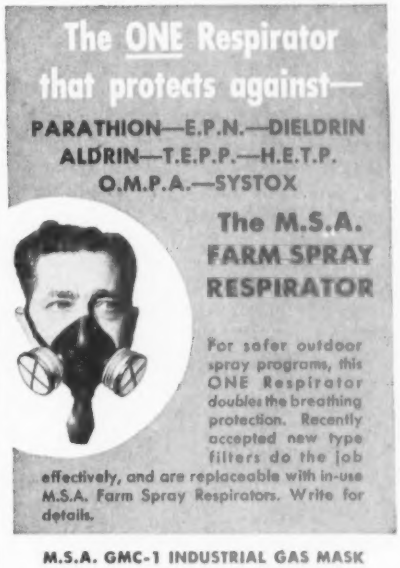
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Teacher's Farm Shop

Farm Mechanics During the Past 25 Years and Our Future Opportunities

By T. J. Wakeman
Teacher-Trainer in Farm Mechanics
Agricultural Engineering Department
Virginia Polytechnic Institute

● THERE HAVE BEEN decided changes in the teaching of farm mechanics during the past 25 years.

Prior to 1928 there was practically no power equipment in the shops. Most of the equipment was for woodworking alone. There was a set of woodworking tools for each three or four boys in the class. Other classes also used the same tools.

Then there were some schools that had just a few woodworking tools and a small assortment of other hand tools. The projects constructed and skills developed were mostly in wood.

Neglect Farm Mechanics

The time devoted to farm mechanics was seldom more than 25 percent. The farm mechanics activities were usually performed in the cellar room of the school building during the spring and fall months. School boards usually set up a revolving fund of about $25 for supplies for the year. There was little reference material available.

The teachers had little or no college training in farm mechanics.

Today the vo-ag building costs from $30,000 to $125,000 compared to $1,800 in 1928. The shop equipment would not average over $300 per department then, now it costs from $8,000 to $15,000 to equip a farm mechanics shop to meet the minimum needs of the all-day young farmer and adult groups of today.

That looks like a big increase but let us not forget the number of tractors increased from 600,000 to 4,100,000 since 1928. The tractor is a good index machine since it is the main source of farm power. Equipment increased in about the same proportion because a tractor is of little use without equipment.

A much larger percentage of the projects today are made of metal than in 1928. Welding that was done in the forge is now done with arc or gas welders

MAKESHIFT . . . At first, any place would do for farm mechanics.

in an easier and quicker method. Many hundreds of thousands of dollars in parts have been saved by welding, plus millions of dollars saved in crops, by the speed accomplished by welding, over dismantling and installing new parts.

Metal is available in many more shapes, kinds, and dimensions than in the earlier days. This encourages more construction and repair work of a more durable nature. The power hack saw, now found in the shops where the farmers education needs are met, encourages easier, faster, and neater work with metal.

Other devices in the farm mechanics program in metal work which have helped to take some of the hard work out of repair, construction, and maintenance are the electric drill and grinders, both portable and stationary. Where it took two men two hours to grind a five foot mower blade by hand, now one man can do a better job grinding a seven foot blade in twenty minutes on an electric grinder.

Following the installation of sturdy power woodworking equipment, many functional, valuable woodworking projects have been constructed on an educational basis in a short time. Today a high school boy, young farmer, or adult farmer can learn to use this equipment and at the same time construct feeders, hay racks, wagon bodies, etc. in a very short time.

Before the power woodworking equipment was installed it would take a student one school year to complete such a project. With such equipment, time is left to receive training in the care, operation, and adjustment of the farm machinery found on the farm today.

In recent years farm mechanics courses are taught practically every day except Saturday and Sunday during the year in schools where the educational needs in farm mechanics are met. This has brought about a great demand for more and better buildings, more and better trained vo-ag teachers.

Helps Sell Vo-Ag

The growth of farm mechanics programs in the vo-ag departments during the past 25 years has contributed immeasurably to the selling of the vo-ag programs by giving the school group members, the school board administrators, and community members some more tangible evidence of the practicability of vocational agriculture. The growth of the farm mechanics program has contributed to the students supervised farming program.

It has made it more interesting, more profitable, more complicated and at the same time more educational. The students have found there is a great carryover from tractor care, maintenance and operation of today's hot-rod problems.

To the farm shop teaching section there has been added in many schools since 1928, farm masonry, soldering, arc and acetylene welding, tool fitting, farm plumbing, and power woodworking. There have been five other teaching areas added to farm mechanics.

Even though the young and adult farmer groups have been a part of vocational agriculture since 1917, more instruction in farm mechanics is now given to them than was previously practiced.

Some small buildings are being constructed in farm mechanics. However, the maintenance work on existing farm buildings makes up a greater portion of the farm mechanics program than was done in previous years. A farmer builds few new buildings during his lifetime, but he must take care of the maintenance work that is ever present.

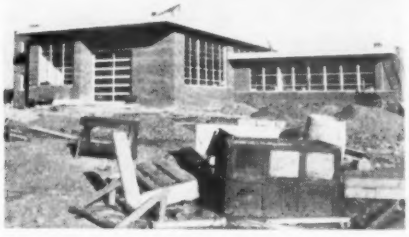
A look at the condition of buildings on the farm soon shows that even more of this type of training will be needed in the future.

Since 1928, instruction has begun on soil and water management and this is now a part of the farm mechanics program. Although a good start has been made in this area of farm mechanics, it still needs to be expanded.

Taught to Use Levels

In this area, vo-ag students have been taught to run levels and contours, to construct and maintain terraces, to cut gullies, to construct and maintain broad base ditches, to practice irrigation, to control wind erosion, and to practice better mulch cultures.

Many of the states are giving instruction in farm mechanics in the area of rural electrification. Since 90 percent of the farms are now electrified, and since



NEW SHOP BUILDINGS... They came later.

most farmers know little about rural electrification, it has become necessary to include instruction in this area in the farm mechanics program.

In the earlier years of farm mechanics instruction, the subject was taught as a separate course from agricultural science work. Today, the trend is toward correlating the two into one subject. The trend is also for teaching a complete topic rather than that of jumping from one in agricultural science to still another in farm mechanics work.

Colleges Train Teachers

In fact, in most schools it is almost impossible to differentiate between the beginning of farm mechanical work and where agricultural science work ends. The teacher training institutions for vocational agricultural work are doing a much better job of instruction in farm mechanics than was done prior to 1928.

The program has been expanded from no farm mechanics instruction in the college to that of as high as 30 quarter units of instruction in the subject. As a result, better teachers of farm mechanics are being prepared each year in the training institutions.

Use Reference Material

One of the soundest changes during the past 25 years has been the ever increasing use of references. The use of references, including the operator's manuals, is taking the place of much of the lecture or "telling" method once used. Teachers realize the students cannot remember what they are told, but if taught to use references in school, they can go on their own to a great degree in solving their problems at home and throughout life.

To some, it may seem that the job in farm mechanics in our vo-ag departments is being well done. To others, it is felt that the surface has never been scratched. Some are meeting the needs —some of us do not know what the needs are.

Compare what you have done with what you can do. What other group has the facilities, the training, the ability and opportunity to do more for the farmer than we have in vocational agriculture? Let us use these opportunities to make the results of our efforts during the next five years surpass the good work that has been done during the past 25 years. —*End*

★

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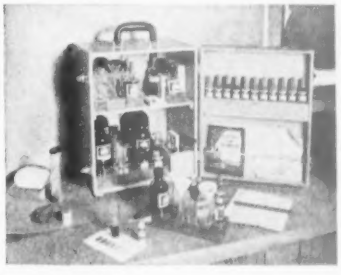

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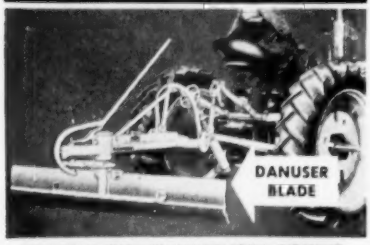

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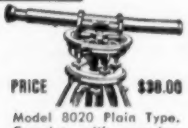

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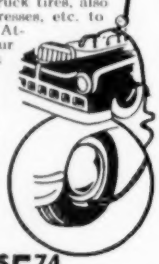

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NVATA NEWS

EXECUTIVE COMMITTEE MEETS—The executive committee of the National Vocational Agricultural Teachers Association met at Lake Geneva, Wis., July 21-23.

Jess Smith, past president and treasurer of the association, made all arrangements for the committee. Meetings were held in the vocational agricultural room of the Lake Geneva High School.

Arrangements were completed for the national convention of the NVATA to be held November 21-27 at the Conrad Hilton Hotel, Chicago. The American Vocational Association has its annual convention during this same period.

The convention program, as agreed upon by the executive committee, is as follows:

Saturday, November 21

8:00 a.m.-5:00 p.m., executive committee meeting.

7:30 p.m.-10:30 p.m., executive committee meeting.

Sunday, November 22

9:00 a.m.-12:00 noon, first general session.

1:00 p.m.-5:00 p.m., NVATA regional meetings.

Monday, November 23

1:30 p.m.-4:30 p.m., second general session.

Tuesday, November 24

7:00 a.m.—annual NVATA breakfast.

Wednesday, November 25

8:00 a.m.-10:15 a.m., NVATA regional meetings.

Thursday, November 26

1:00 p.m.-3.00 p.m., final NVATA business session.

Friday, November 27

8:00 a.m.—final executive committee meeting.

Meeting in general session each day from 8:00 a.m. until 5:00 p.m., the executive committee disposed of the following business.

1—Retirement. The Retirement Committee, headed by Joe Cuffman, Texas, recommended that the committee continue to study all phases of retirement. He reported that the committee would continue to send out material on retirement to the various state associations and was working on the improvement of the present civil service bill.

Don Mullen, left, vo-ag teacher, Jefferson, Wis., has just sampled some good Wisconsin Cheddar cheese. Jess Smith, center, is cutting a "slice" of cheese to satisfy the hunger of S. F. "Pete" Peterson.

The committee suggested that the NVATA make a comprehensive analysis of the various forms of retirement, now available or those that might be available in the future, including civil service, social security, and various state retirement programs. From this analysis a comprehensive report on the entire field of retirement could be sent to each state association to guide their action concerning their association members.

2—History. The committee voted unanimously to begin compilation of a history of the national organization. The executive secretary was delegated to begin this work.

3—Creed. It was voted to make the Agricultural Teacher Creed, prepared by the NVATA, available to the various states. They in turn could see that each of their state members received one. The committee recommended that each vo-ag teacher receiving such a creed frame it and place it in an appropriate part of his vo-ag room.

4—Service Awards. At the present time, the NVATA has several award keys available for state associations to use and present to their members for service in teaching.

It is left to the various states to set up the number of years they wish to require members to teach before receiving these keys.

The committee suggested that the regional vice-presidents take an opinion of the delegates at the national convention within their regions and see if some uniform system could not be agreed upon to form the basis of giving these keys to members of the NVATA. It was suggested that possibly an award for 10 and 20-year service might be acceptable.

5—Relationship Committee. Vice-president Bob Howey, Illinois, was appointed to head a relationship committee of the NVATA. Its responsibility would be to maintain and improve relationships with such organizations as the FFA and other organizations within the field.

At the final session, the committee voted to meet in the Joplin, Mo., area for the 1954 summer executive meeting.—*End.*

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Better Farming Methods
Mount Morris, Illinois

a Watt publication

My How Our Baby Has Grown!

● WHAT A THRILL and satisfaction to be in on the 25th Birthday Party of "our baby," Better Farming Methods, and to note how the Watt diet has developed its stature and service.

The original idea, in founding this publication, was based on the need for current information about the constant and rapid changes in modern farm equipment. As publishers of the long-established trade magazine, now Farm Equipment Retailing, we were receiving countless inquiries from vocational agricultural instructors for information relative to the use and sources of supply of various types of farm equipment; interim data between frequent and necessary revisions of text books.

Working closely with industry leaders and the agricultural engineering departments of the land-grant colleges, our editorial pages relayed the results of research while it was hot.

Assured by readers that a service was being rendered, the scope was expanded to include county agents. Emphasis was given to the benefits and advantages of close cooperation between the four most important local factors—the vo-ag instructor, the county agent, the banker, and the farm equipment dealer. The latters' show rooms and shop facilities afforded exceptional laboratories for the study of farm mechanics.

Due to an enlarged program for our older publications, we were glad to have "our baby" adopted into the Watt family and have noted with extreme pleasure the high editorial standards that have marked its 25 years of service to those leaders who train and advise young farm folks—our Nation's greatest asset.

It is certainly gratifying to know that "our baby" is proving such a credit to the Watt family, and fulfilling so well the Creed of The Future Farmers, the 25th anniversary of which we also celebrate this year.—*ARCH S. MERRIFIELD, Editor, Farm Equipment Retailing.*

Use the Talents You Possess

● THIS IS YOUR MAGAZINE!

With that statement, Arch Merrifield launched a magazine 25 years ago in September, 1928.

If you still have a copy, you will find the statement on page four. It is the first sentence of the magazine.

That statement is just as true today as it was 25 years ago. This IS your magazine.

The name has changed, from Better Farm Equipment and Methods to Better Farming Methods, the magazine is sent to more agricultural leaders now than in 1928, but the original idea and the pledge of service to you has remained constant throughout this past quarter-century.

In much the same way, you agricultural leaders have said to the farm people of America concerning your work: "This is your service." What you try to do, what you strive to correct, and what you attempt to teach is not primarily for yourself, but for your farm people.

Times have changed, but the basic idea behind your profession has remained constant, too, throughout the past 25 years.

This year has been a great year for agriculture. Farm demonstration work is 50 years old. The Future Farmers of America will hold an anniversary convention in October marking their 25th year.

In looking back over these past 50 years, it seems as though time has proved that only as we serve others can we ourselves grow and progress. Certainly the idea of farm demonstration work and the Future Farmers have served all America well. In so doing, they have grown and prospered.

As we look forward in the future, it might be well to keep in mind that our service to others is responsible for our existence and our growth.

A wise sage once wrote: "Use the talents you possess, for the woods would be very silent if no birds sang except those that sang best." On the 25th anniversary of Better Farming Methods, I would like to share this challenge with you.

As you face the future in your profession, working in the field of agriculture, why not pledge yourself to use all your talents to the best of your ability?

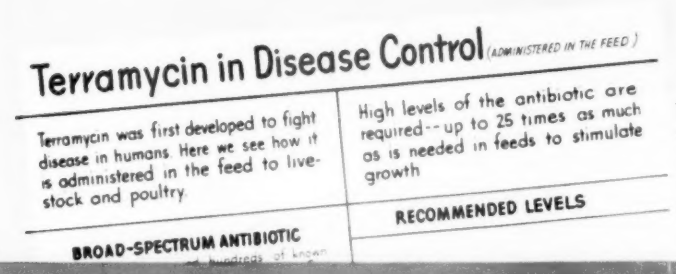
You, your profession, and your farm people are in constant need of new ideas and new approaches to problems.

You possess many talents. You have been trained to use them. Yet, many of them are still hid from the world and have never been used or developed.

Don't be afraid to "sing." In so doing, the entire field of agriculture may hear your song, and benefit from it.

H. L. Schaller

Heavy paper, 22 x 28 inches, printed on both sides. Large readable letters for classroom use.


Terramycin in Disease Control (ADMINISTERED IN THE FEED)
Terramycin was first developed to fight disease in humans. Here we see how it is administered in the feed to livestock and poultry.
High levels of the antibiotic are required--up to 25 times as much as is needed in feeds to stimulate growth
RECOMMENDED LEVELS
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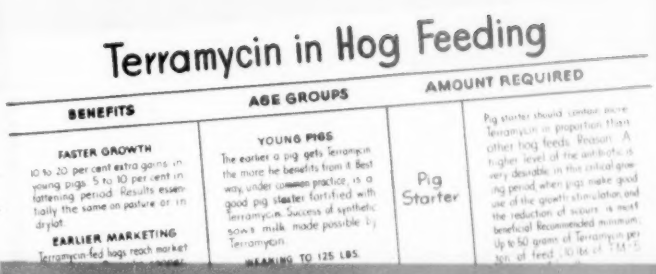
Terramycin in Hog Feeding
BENEFITS
AGE GROUPS
AMOUNT REQUIRED
FASTER GROWTH
10 to 20 per cent extra gains in young pigs. 5 to 10 per cent in fattening period. Results essentially the same on pasture or in dry lot.
EARLIER MARKETING
Terramycin-fed hogs reach market
YOUNG PIGS
The earlier a pig gets Terramycin the more he benefits from it. Best way, under common practice, is a good pig starter fortified with Terramycin. Success of synthetic sow's milk made possible by Terramycin.
Pig Starter
Pig starter should contain more Terramycin in proportion than other hog feeds. Reason: A higher level of the antibiotic is very desirable in the critical growing period when pigs make good use of the growth stimulation and the reduction of losers is most beneficial. Recommended minimum: Up to 50 grams of Terramycin per ton of feed.

2 New Teaching Charts

Free to Vo-ag Teachers–County Agents–Club Leaders

Here is a complete classroom coverage on two phases of an important antibiotic: (1) Terramycin in Hog Feeding; (2) Terramycin in Disease Control.

This material was prepared in response to many requests from the field. It has been approved by Vo-ag men as suitable for class use. (It contains no advertising.)

It consists of a tough, durable sheet 22 x 28 inches, printed with one chart on each side. You also get complete notes, supporting data and suggestions relating to the points on the charts.

There is no charge to Vo-ag teachers, county agents or club leaders; the material will be sent postpaid. Use the coupon below, or give your name and address on a postcard.

Get your charts on synthetic sow's milk

We've had many favorable reports on these charts, and they are going fast. We suggest you send for yours without delay.

Consists of 18 charts, with ample supporting material, suggestions for use and handout booklets. There is no charge and the material is postpaid.

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